

566.39297X00

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Masahichi KISHI

Serial No.: 09/700,384

Filed: January 2, 2001

For: **CODE DIVISION MULTIPLE ACCESS (CDMA)  
TRANSMISSION SYSTEM**

Group: 2662

Examiner: John Pezzlo

**RECEIVED**

JUL 21 2004

Technology Center 2600

**SUBMISSION OF FORMAL DRAWINGS**

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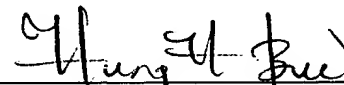
July 15, 2004

Sir:

Applicants submit herewith thirty-eight (38) sheets of Formal Drawings in connection with the above-identified application.

Respectfully submitted,

ANTONELLI, TERRY, STOUT & KRAUS, LLP

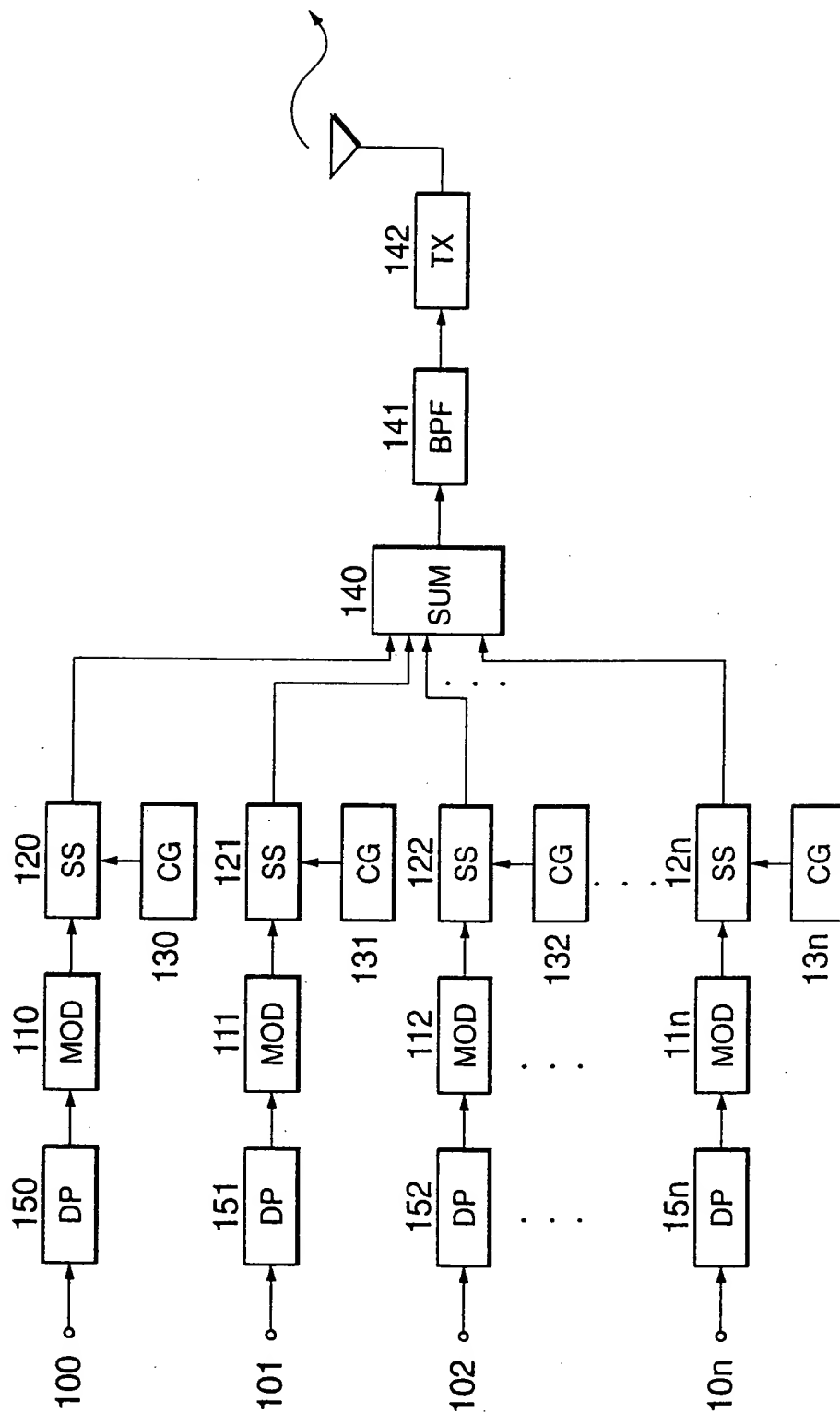
By:   
Hung H. Bui  
Registration No. 40,415

HHB:btd

Telephone: (703) 312-6600  
Fax: (703) 312-6666

FIG. 1

EXAMPLE OF A CONFIGURATION OF DIFFERENTIAL CDMA TRANSMITTER

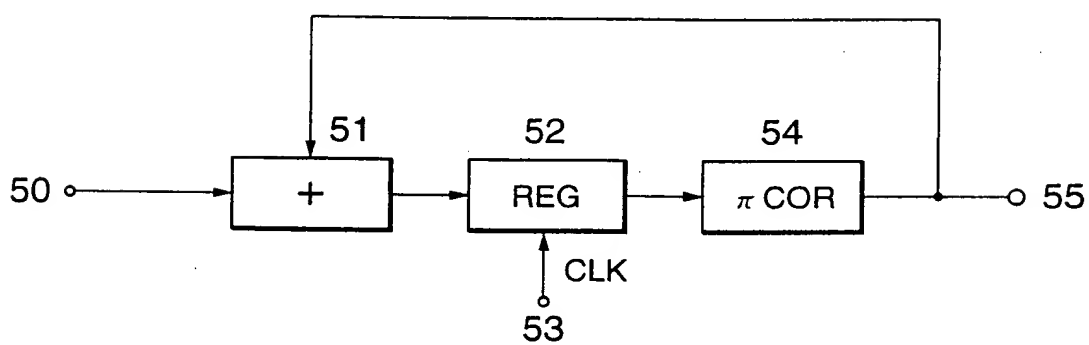




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FIG. 2

EXAMPLE OF A DETAILED CONFIGURATION OF  
DIFFERENTIAL CODING CIRCUIT (DP)





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FIG. 3

INPUT/OUTPUT CHARACTERISTICS OF  $\pi$  CORRECTOR (  $\pi$  COR )

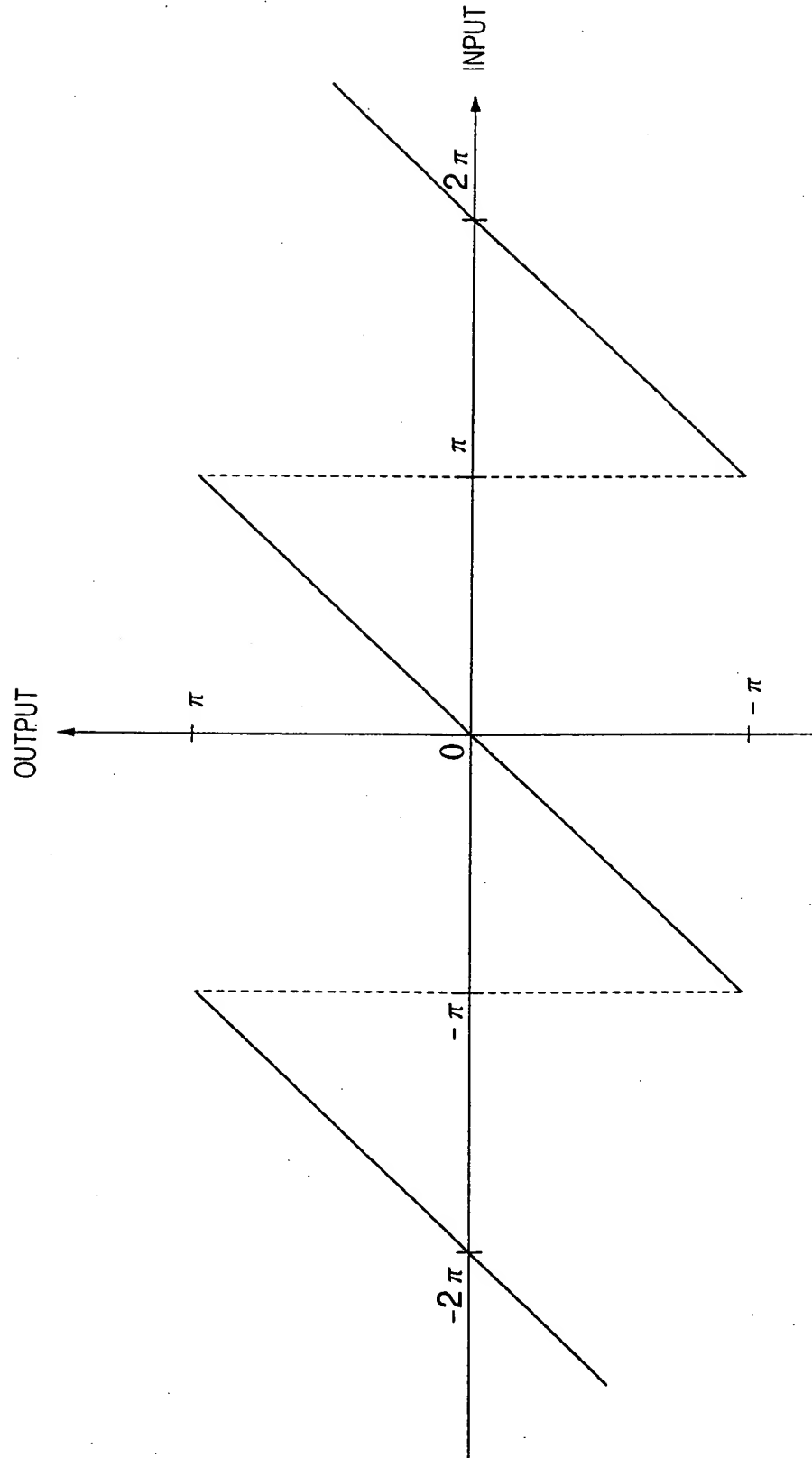


FIG. 4

## EXAMPLE OF A CONFIGURATION OF DIFFERENTIAL CDMA RECEIVER

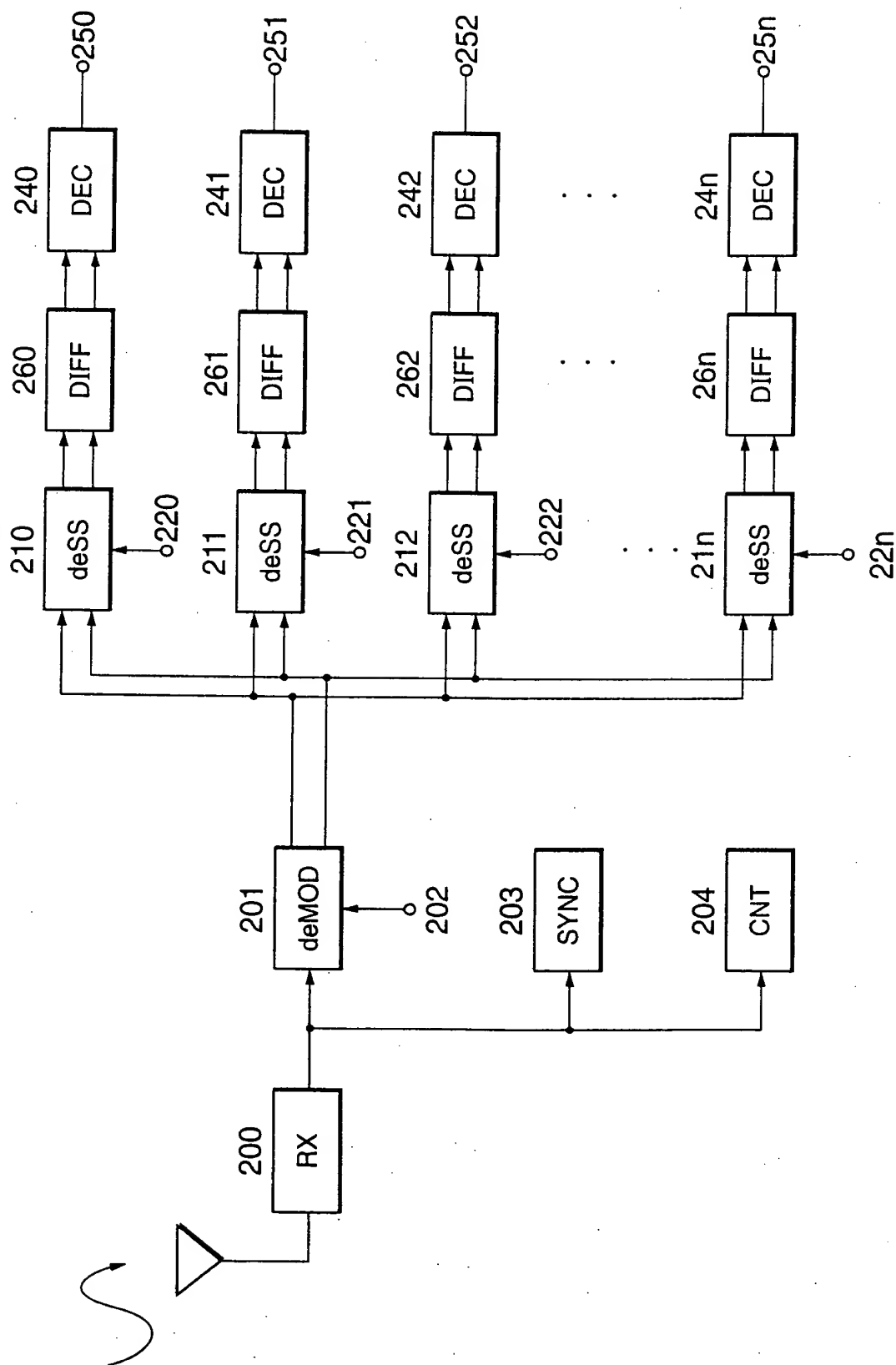


FIG. 5

EXAMPLE OF A DETAILED CONFIGURATION OF DIFFERENTIAL CIRCUIT (DIFF)

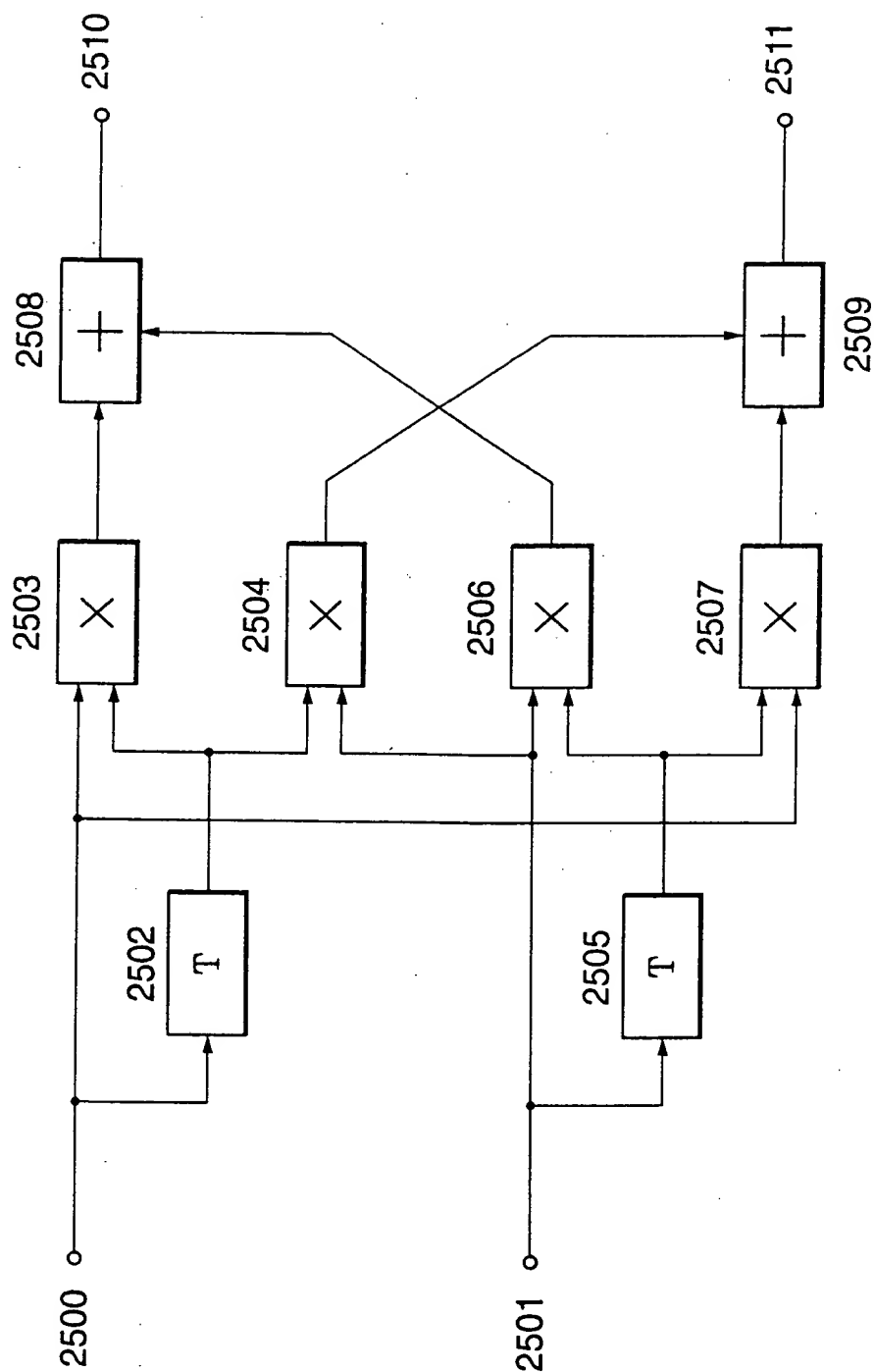
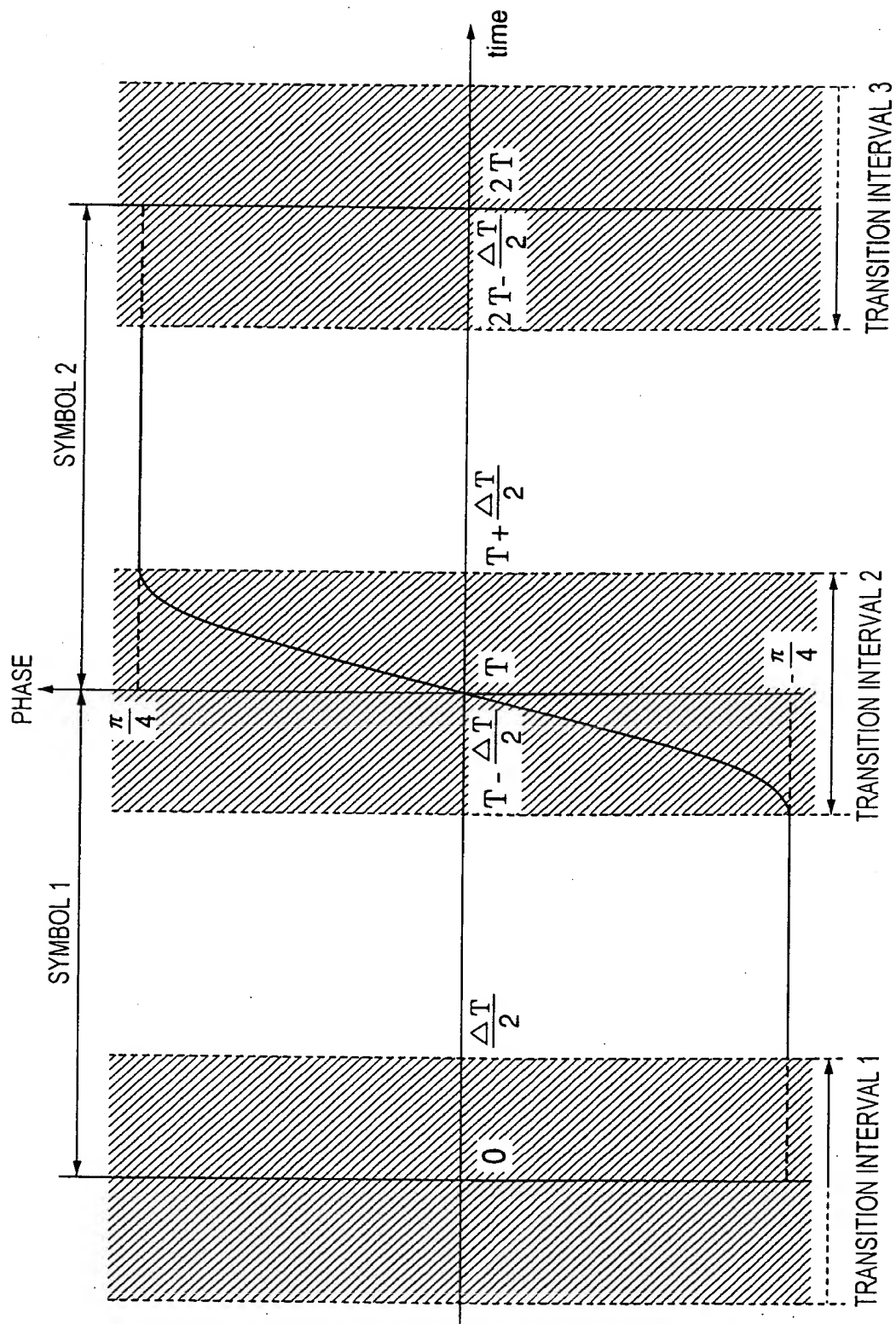


FIG. 6

SCHEMATIC VIEW OF INFORMATION PHASE



# FIG. 7

EXAMPLE OF A DETAILED CONFIGURATION OF  
PHASE CONTINUOUS DIFFERENTIAL CODING CIRCUIT (DP-CP)

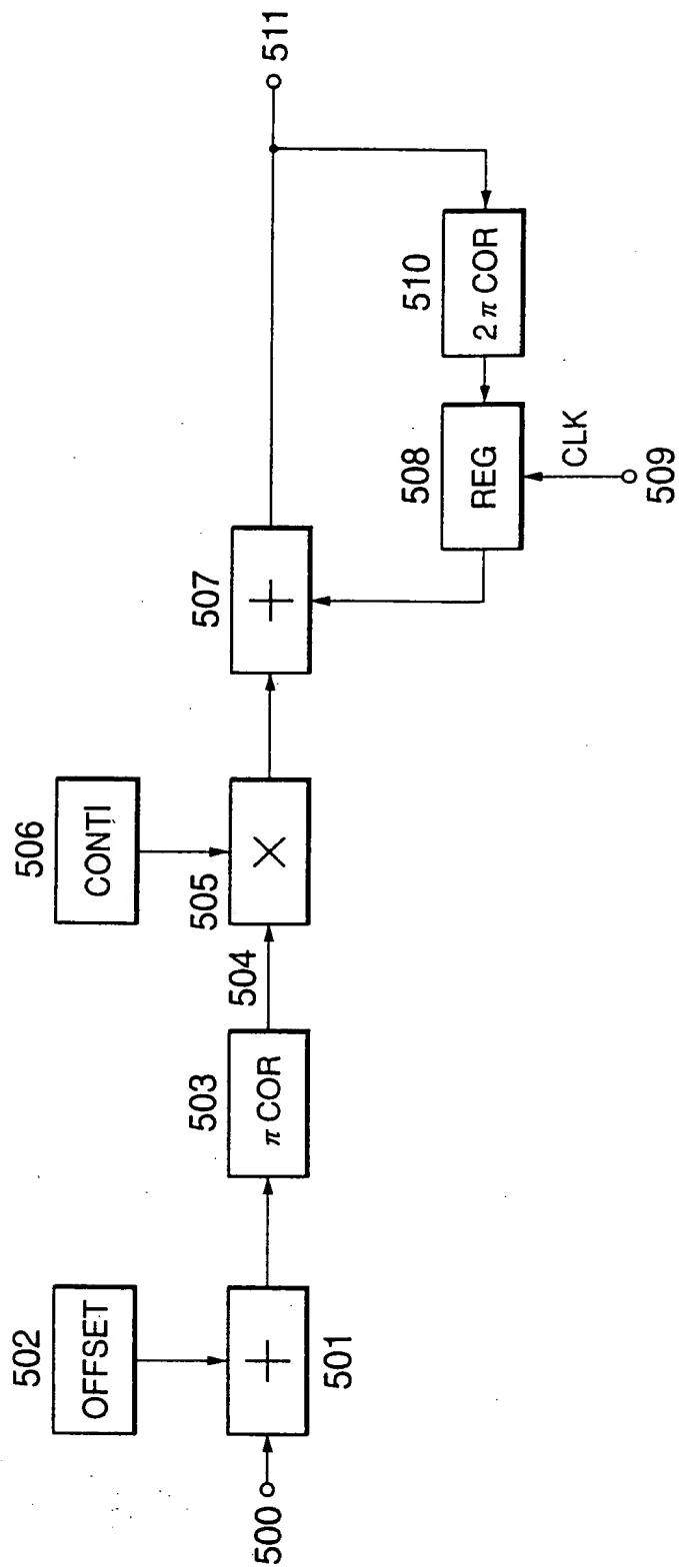




FIG. 8

TIME RESPONSE OF CONTINUATING CIRCUIT (CONTI)

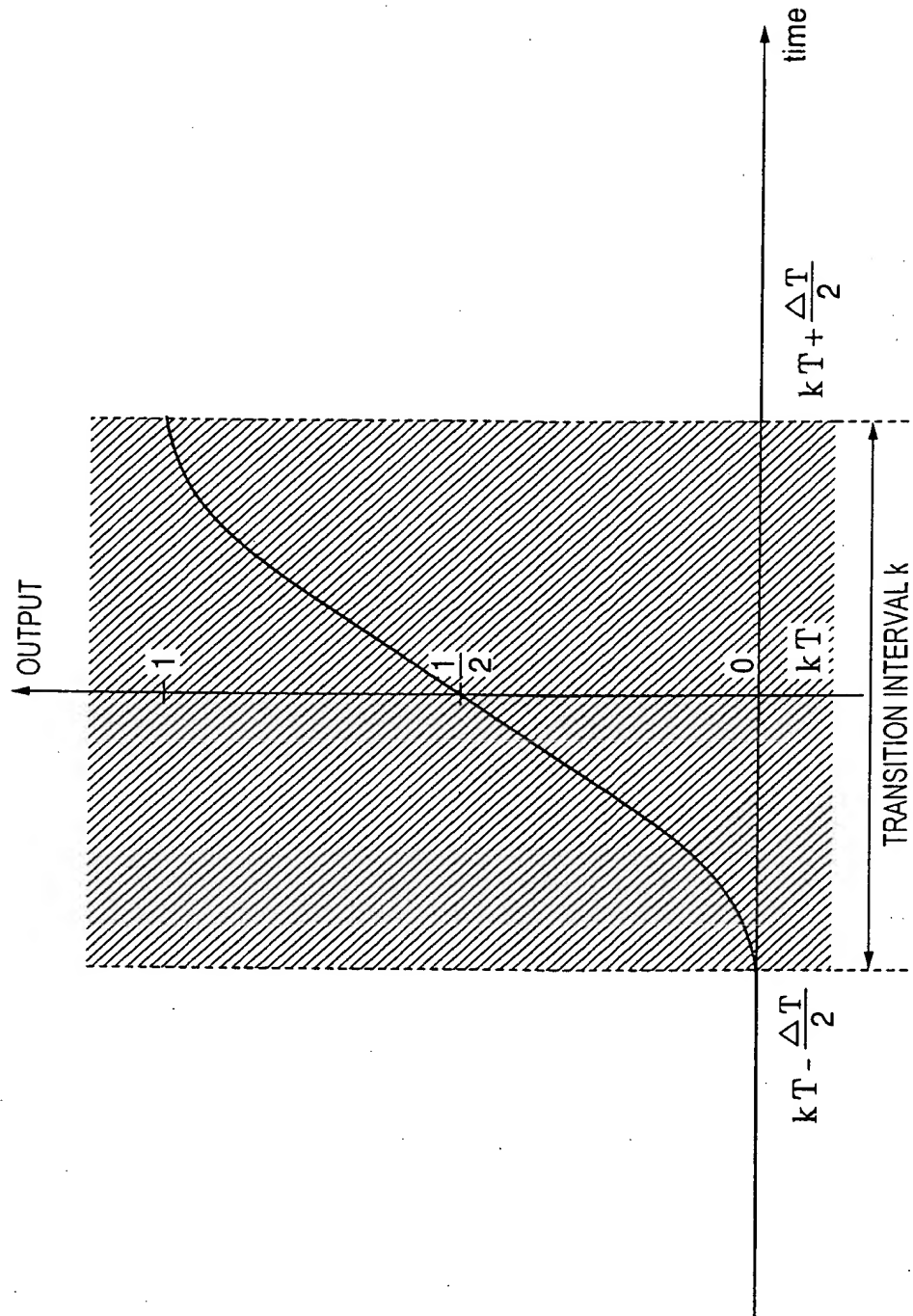


FIG. 9

EXAMPLE OF A DETAILED CONFIGURATION OF PHASE CONTINUATING CIRCUIT (CP)

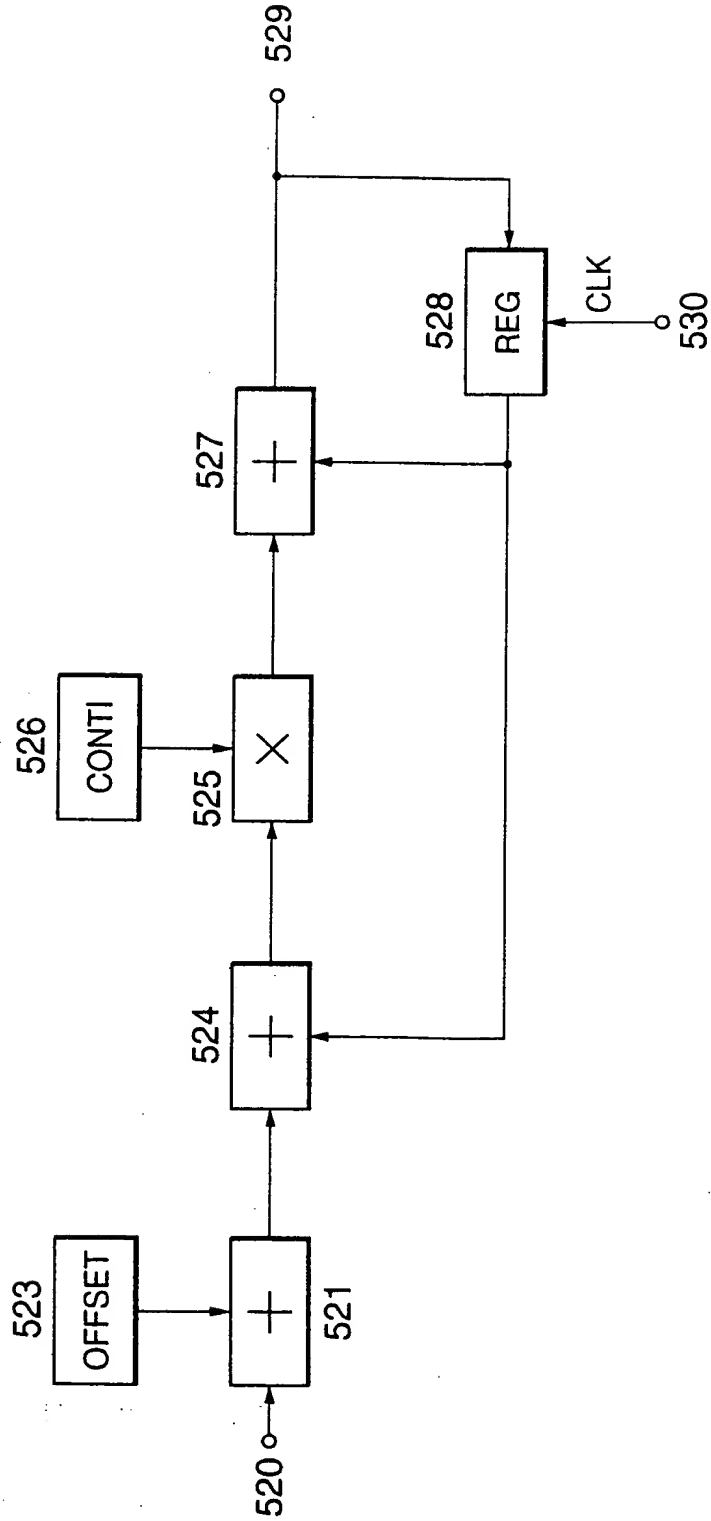


FIG. 10

SCHEMATIC VIEW OF PRIMARY MODULATED WAVEFORM

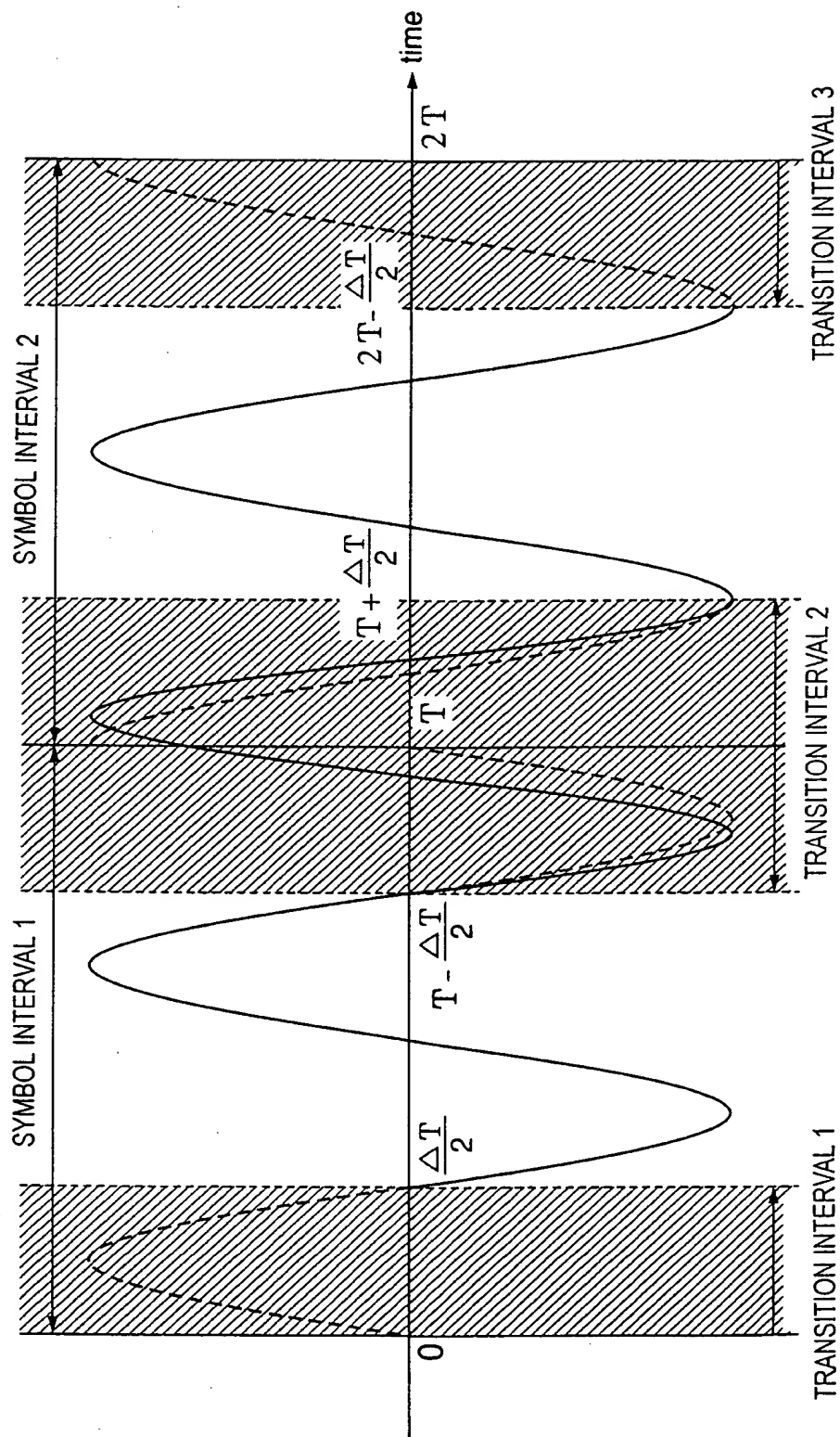
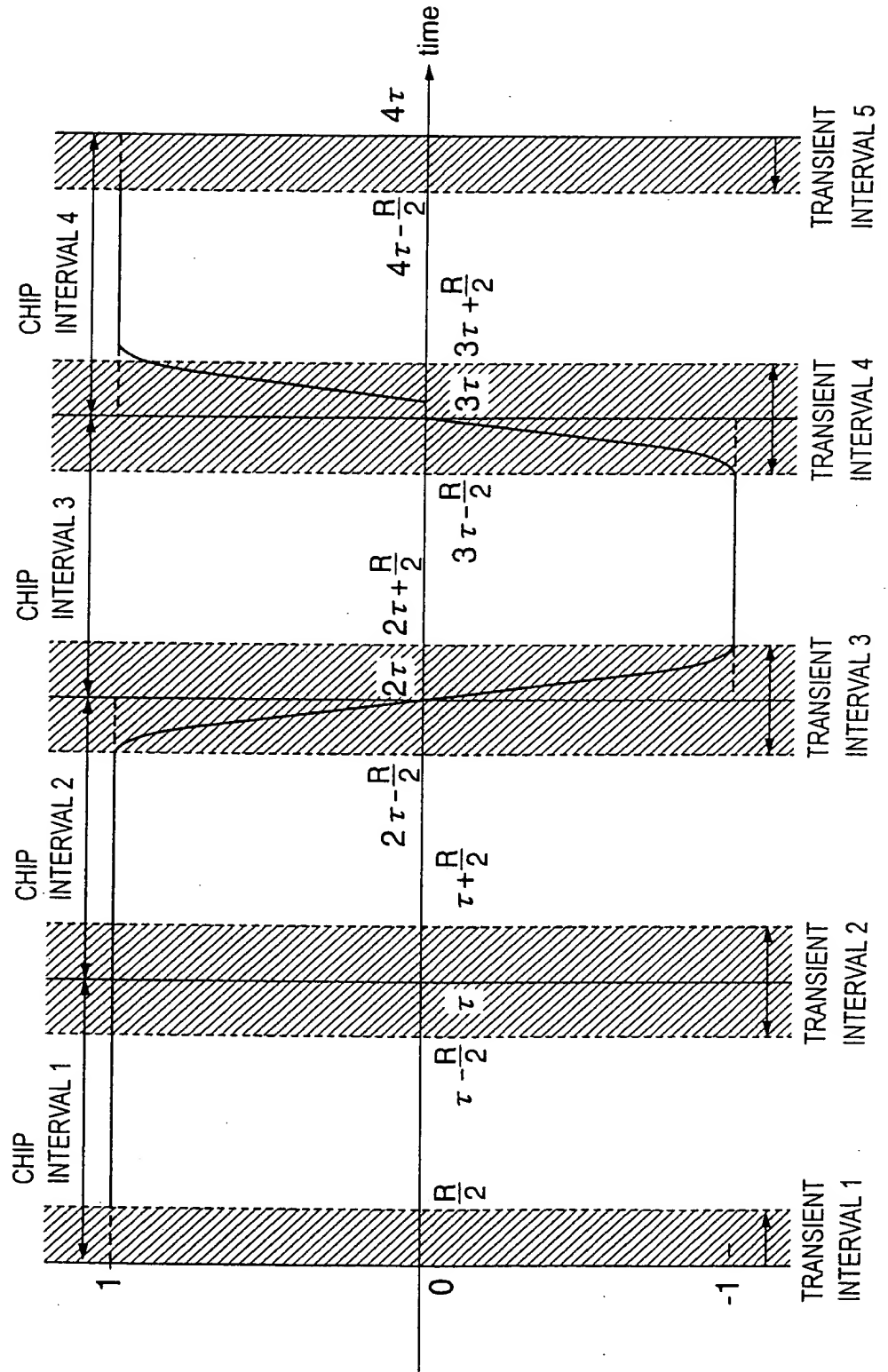


FIG. 11

SCHEMATIC VIEW OF SPREAD CODE SEQUENCE WAVEFORM





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FIG. 12

EXAMPLE OF A DETAILED CONFIGURATION OF SPREAD CODE SEQUENCE WAVEFORM  
CONTINUATING CIRCUIT (CODE-CS)

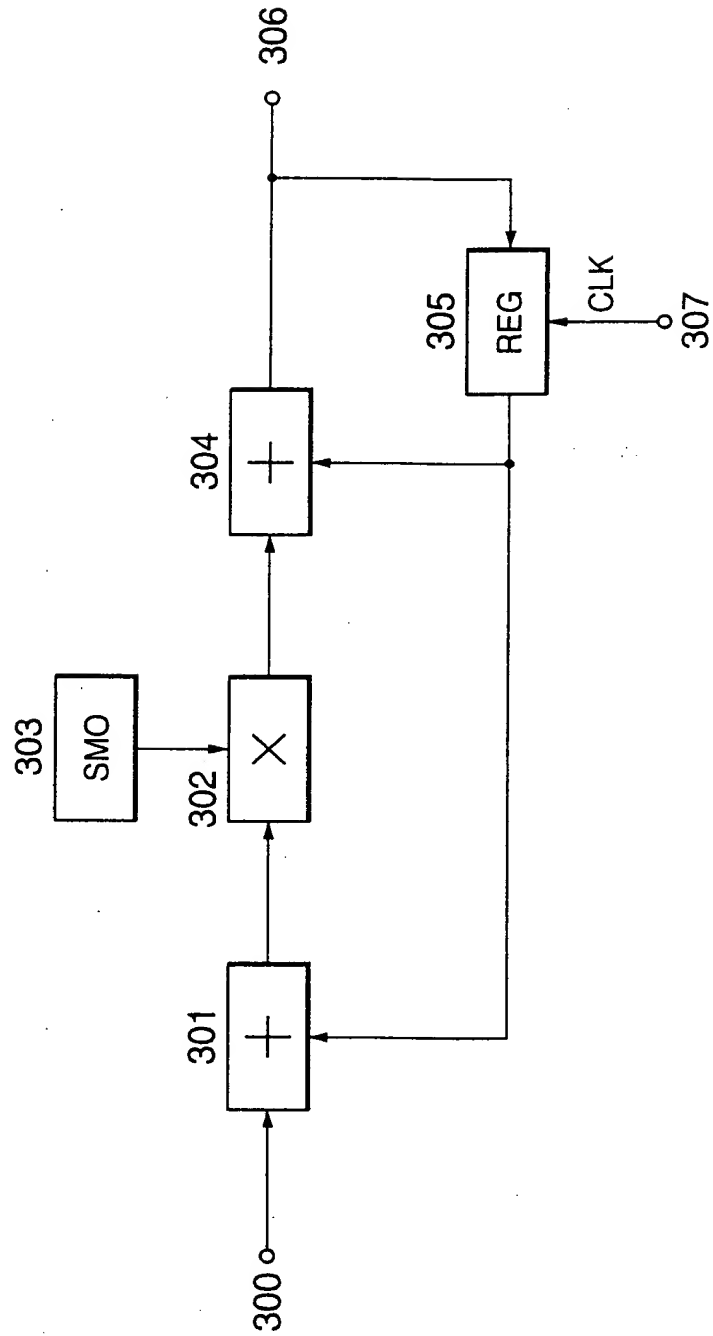
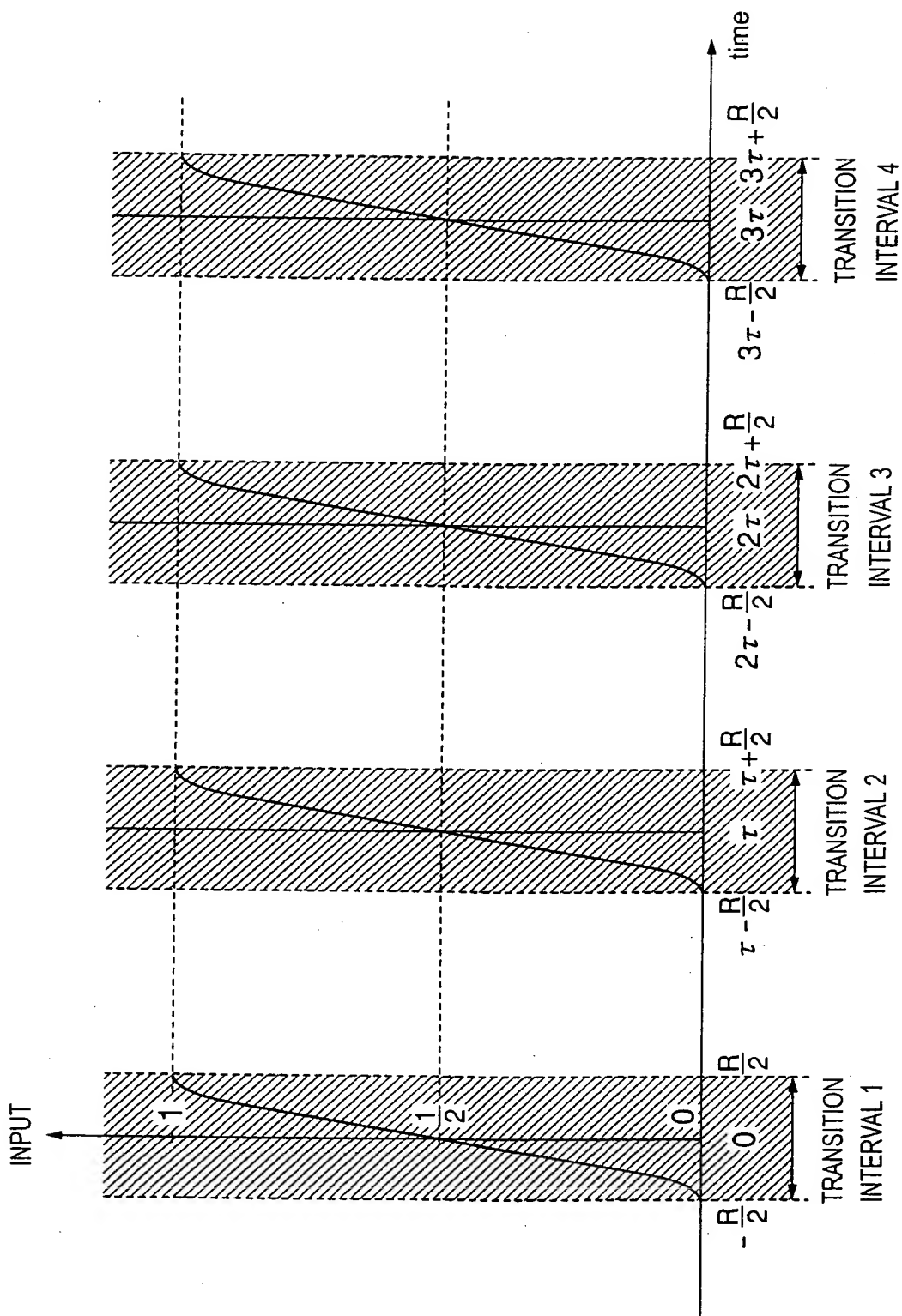


FIG. 13

EXAMPLE OF TIME RESPONSE WAVEFORM OF SMOOTHER (SMO)





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FIG. 14

EXAMPLE OF VIRTUAL SEGMENT INTERLEAVE STRUCTURE

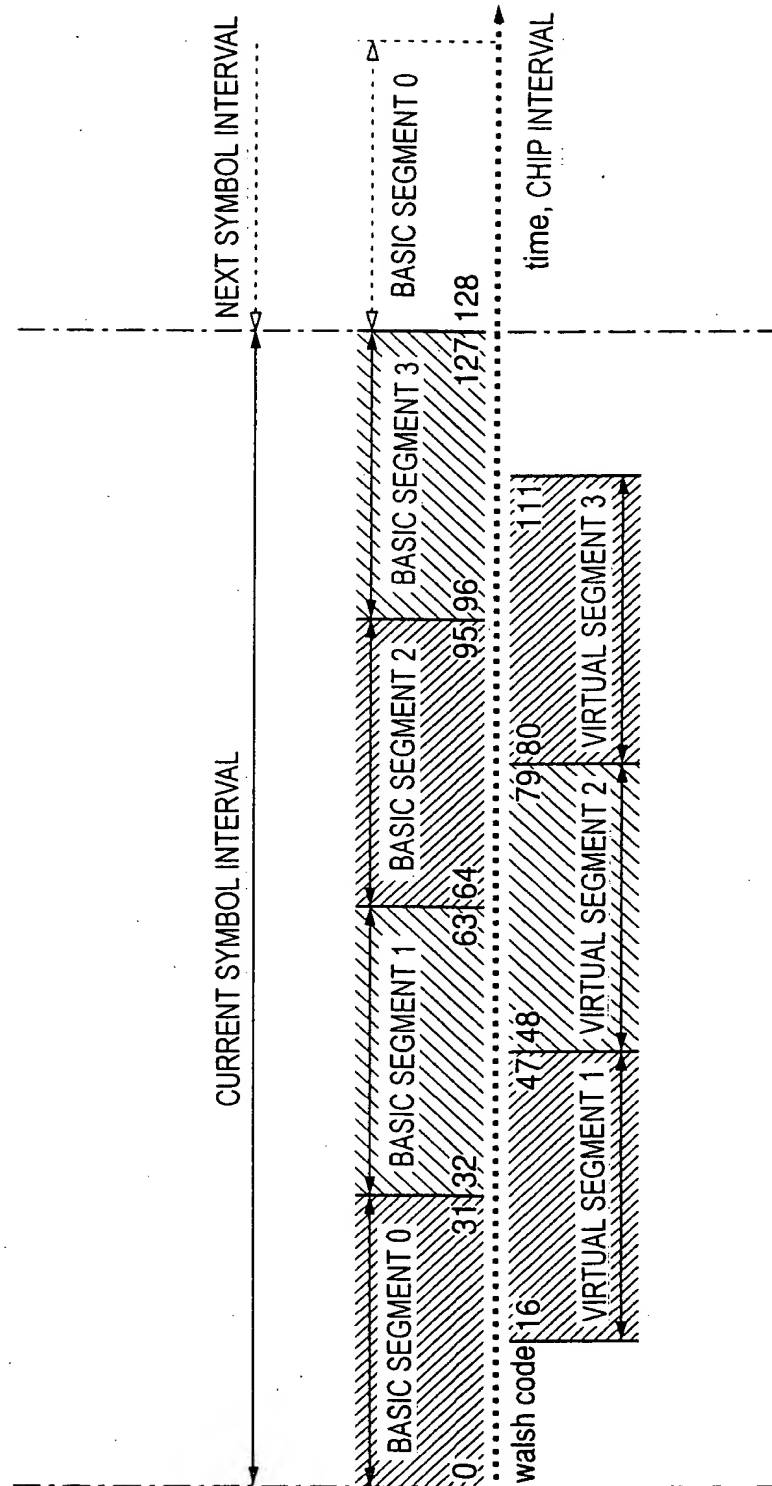


FIG. 15

EXAMPLE OF A DETAILED CONFIGURATION OF VIRTUAL SEGMENT INTERLEAVE  
DESPREADING CIRCUIT (deSS-VSI)

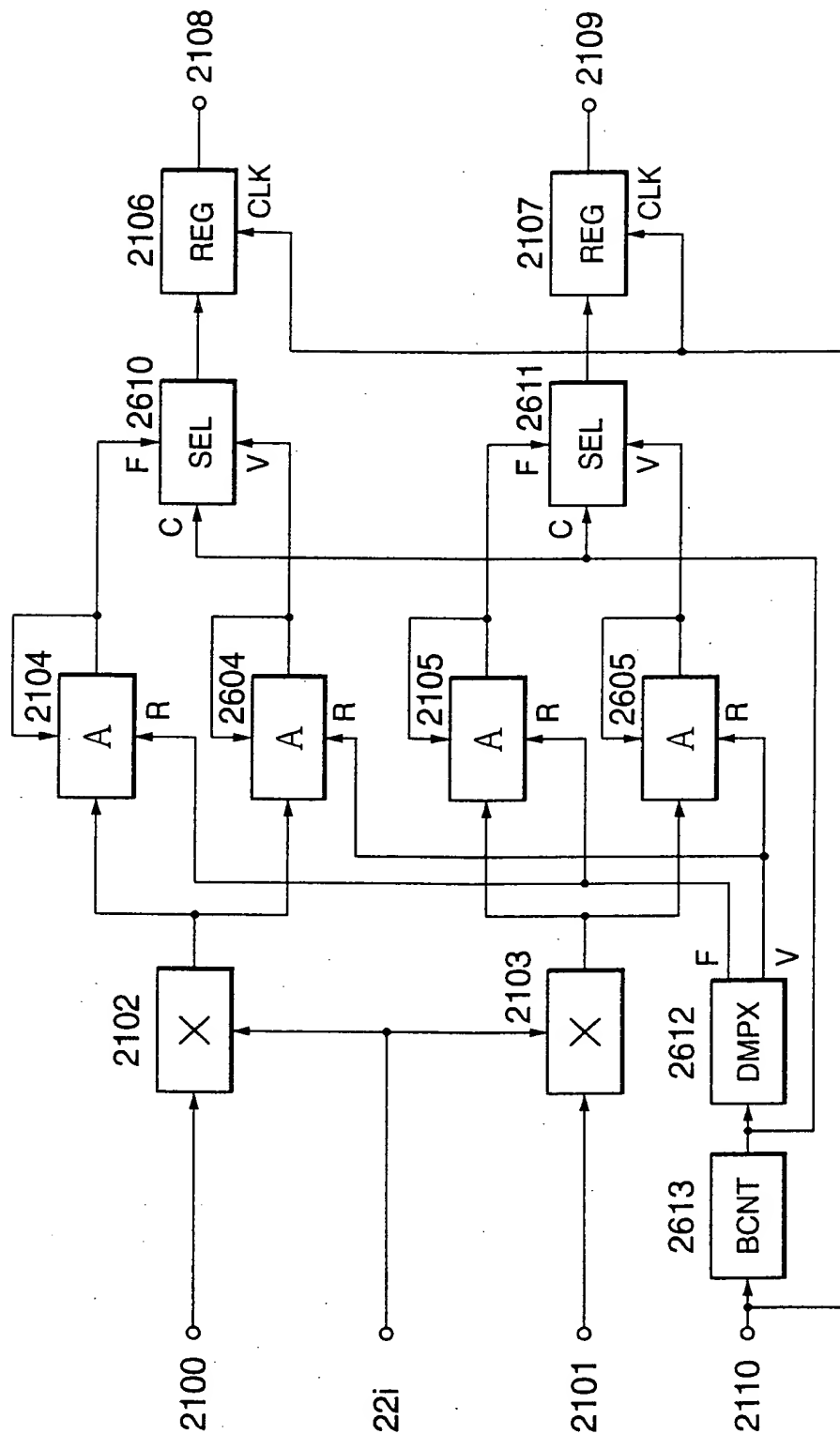






FIG. 16

TRANSMISSION CHARACTERISTICS IN STATIONARY TELEPHONE MODE OF  
DIFFERENTIAL CDMA TRANSMISSION SYSTEM

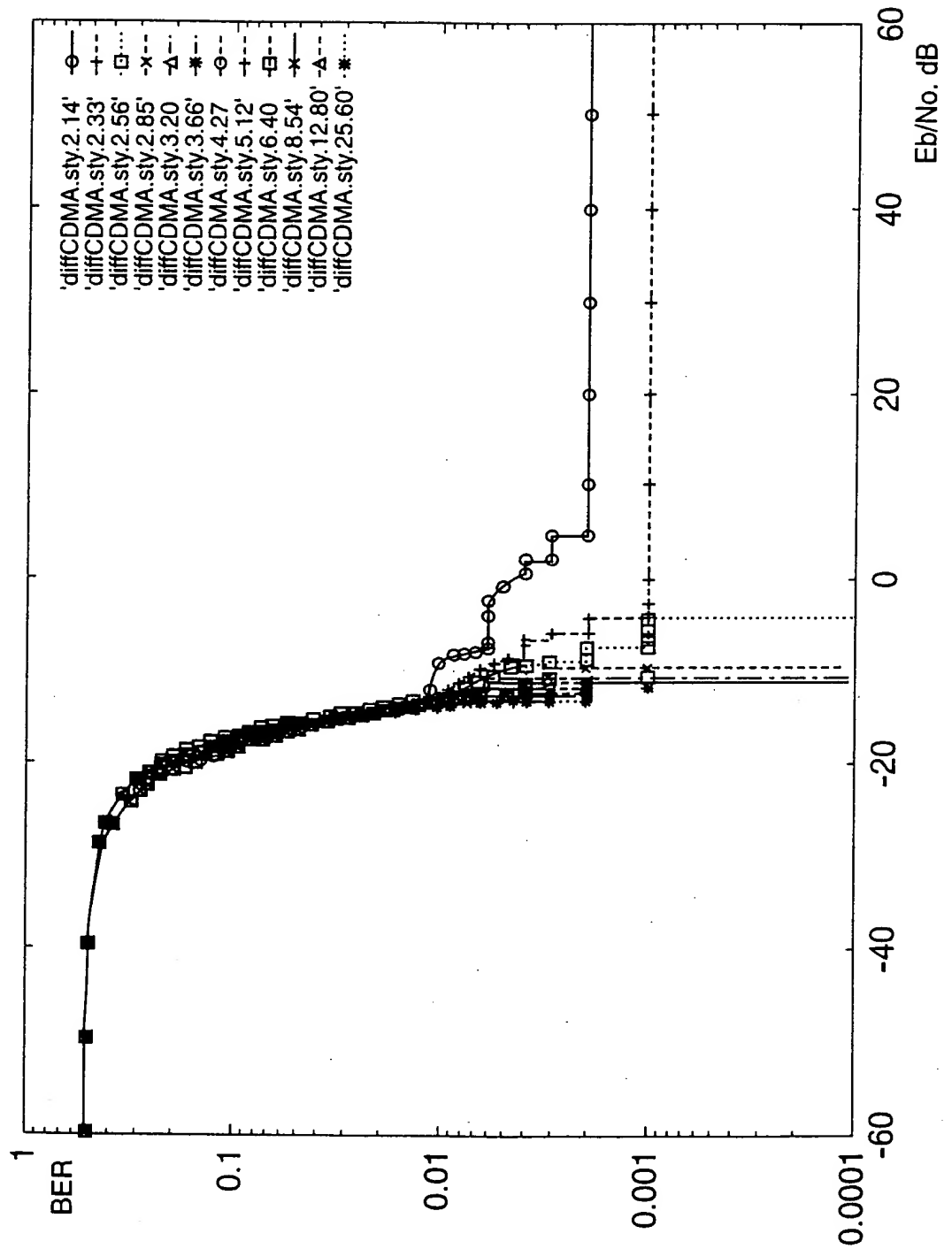
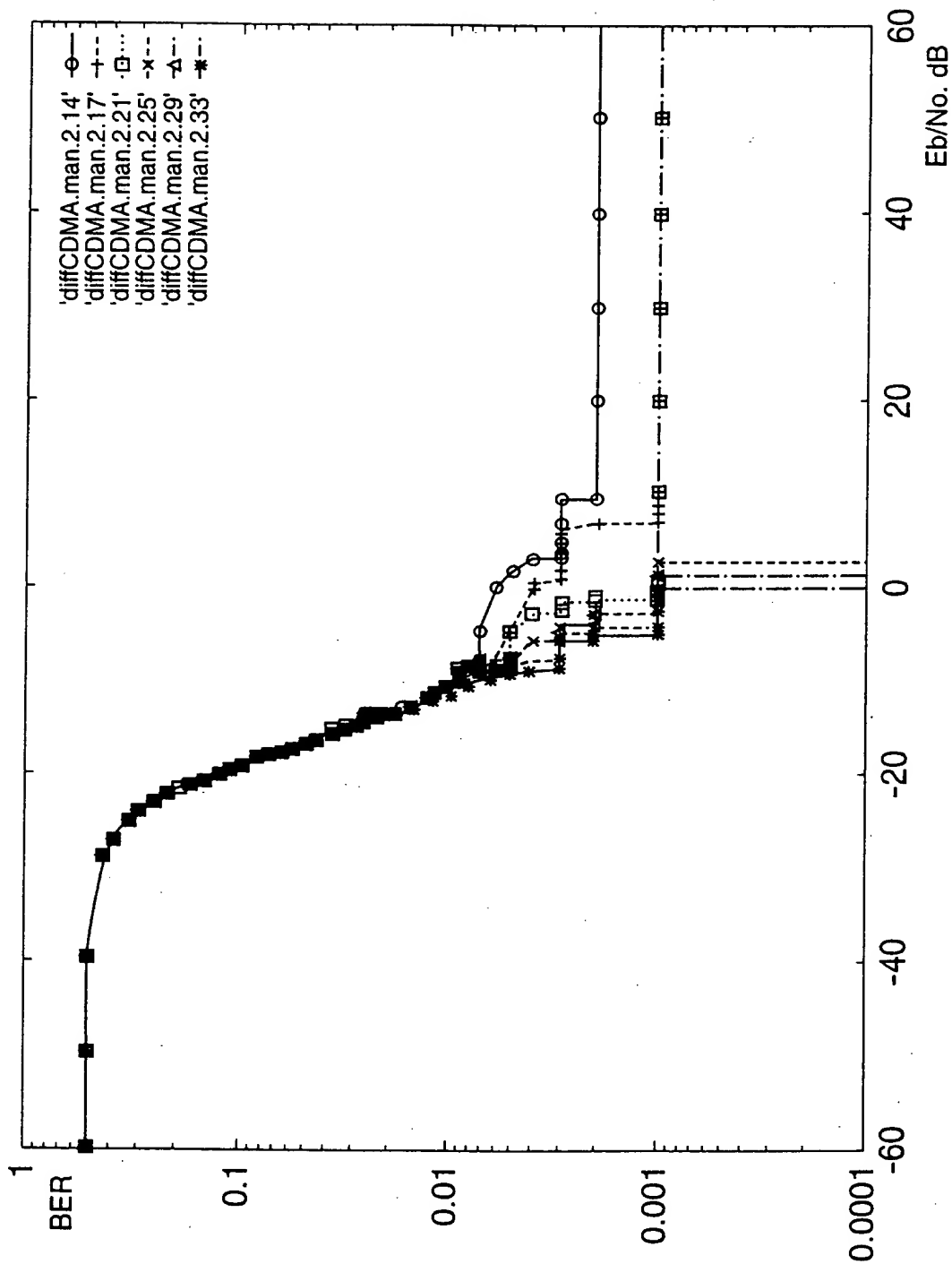




FIG. 17

TRANSMISSION CHARACTERISTICS IN PEDESTRIAN TELEPHONE MODE OF  
DIFFERENTIAL CDMA TRANSMISSION SYSTEM





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FIG. 18

TRANSMISSION CHARACTERISTICS IN AUTOMOBILE TELEPHONE MODE OF  
DIFFERENTIAL CDMA TRANSMISSION SYSTEM

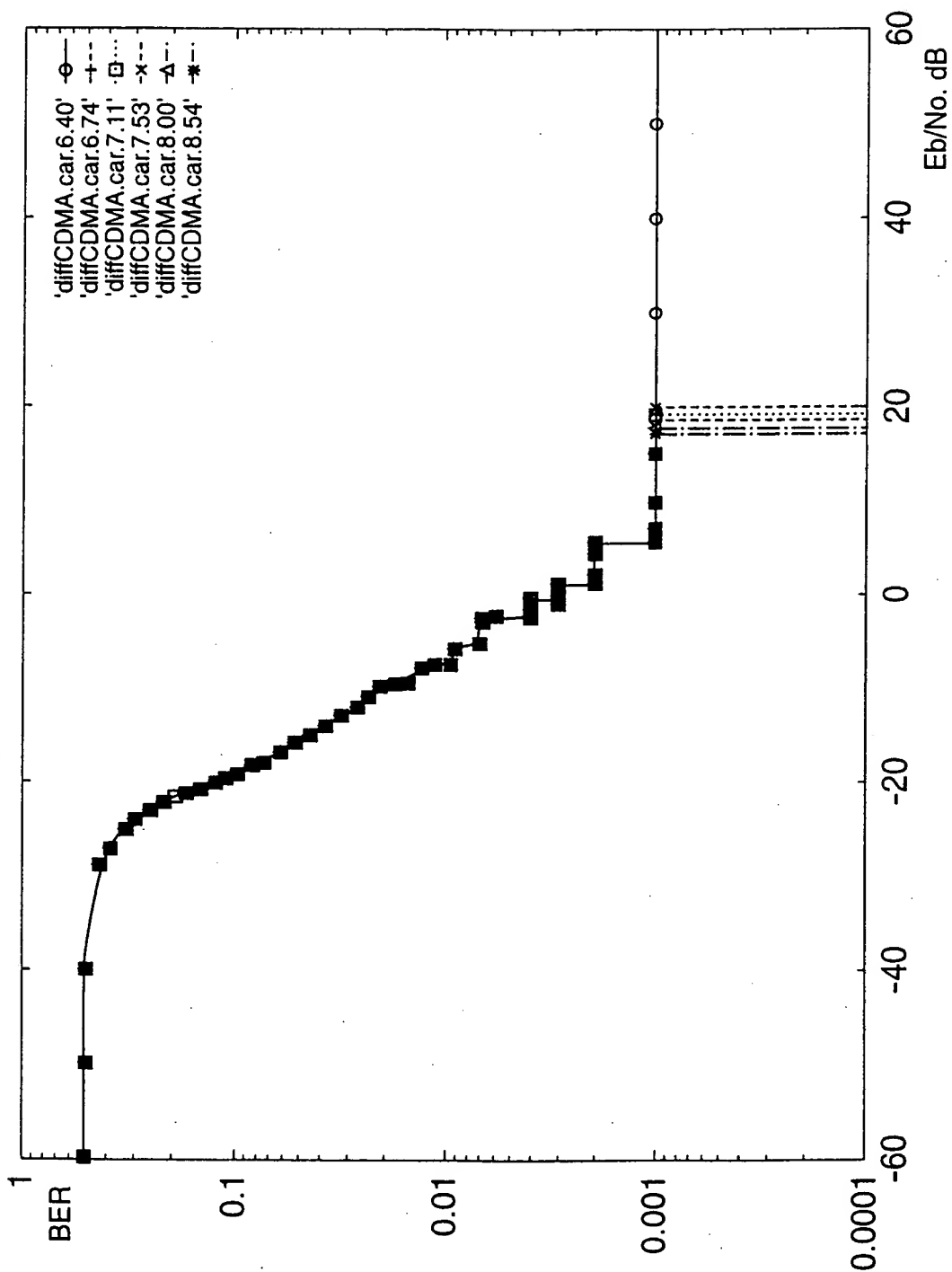


FIG. 19

SCHEMATIC POWER SPECTRUM

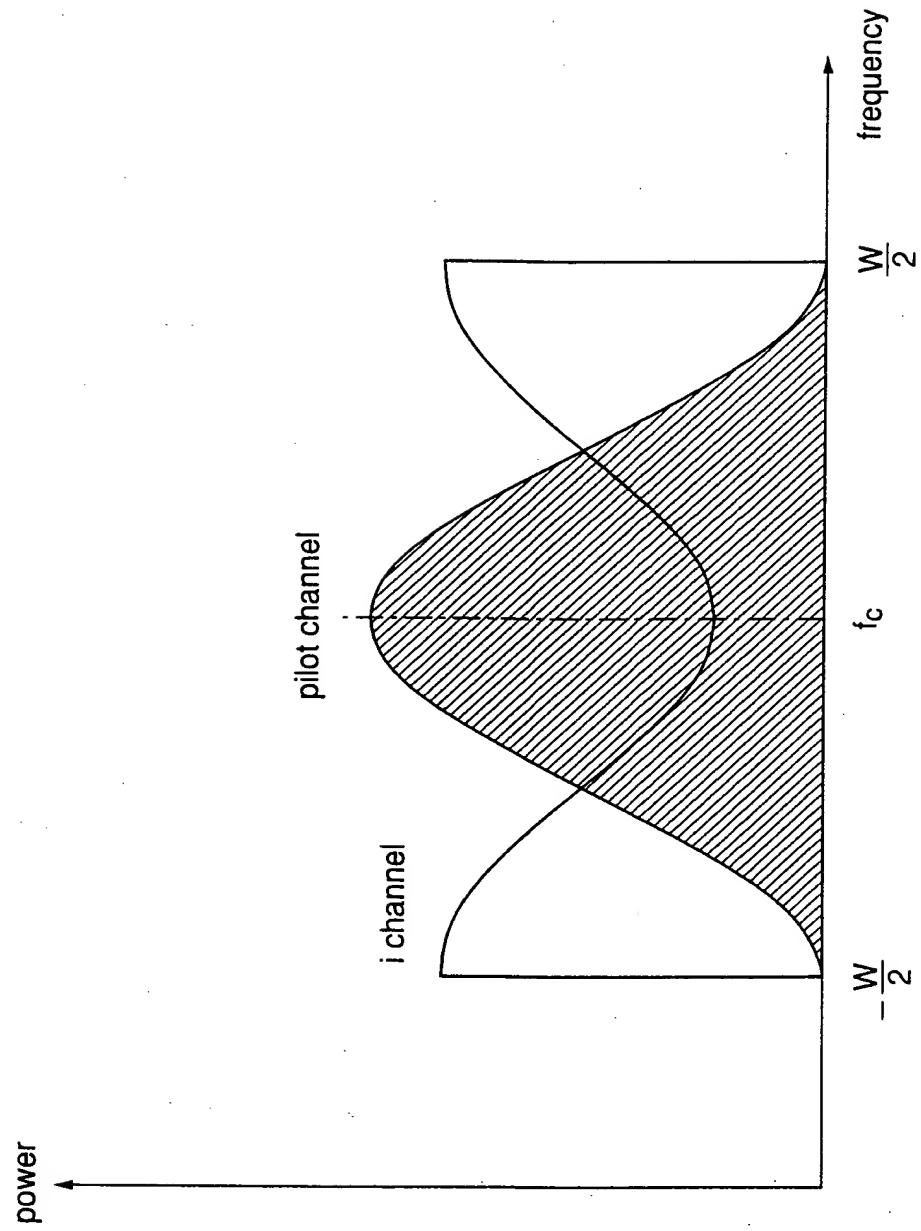


FIG. 20

TRANSMISSION CHARACTERISTICS IN PEDESTRIAN TELEPHONE MODE OF  
PHASE CONTINUOUS PILOT CDMA TRANSMISSION SYSTEM

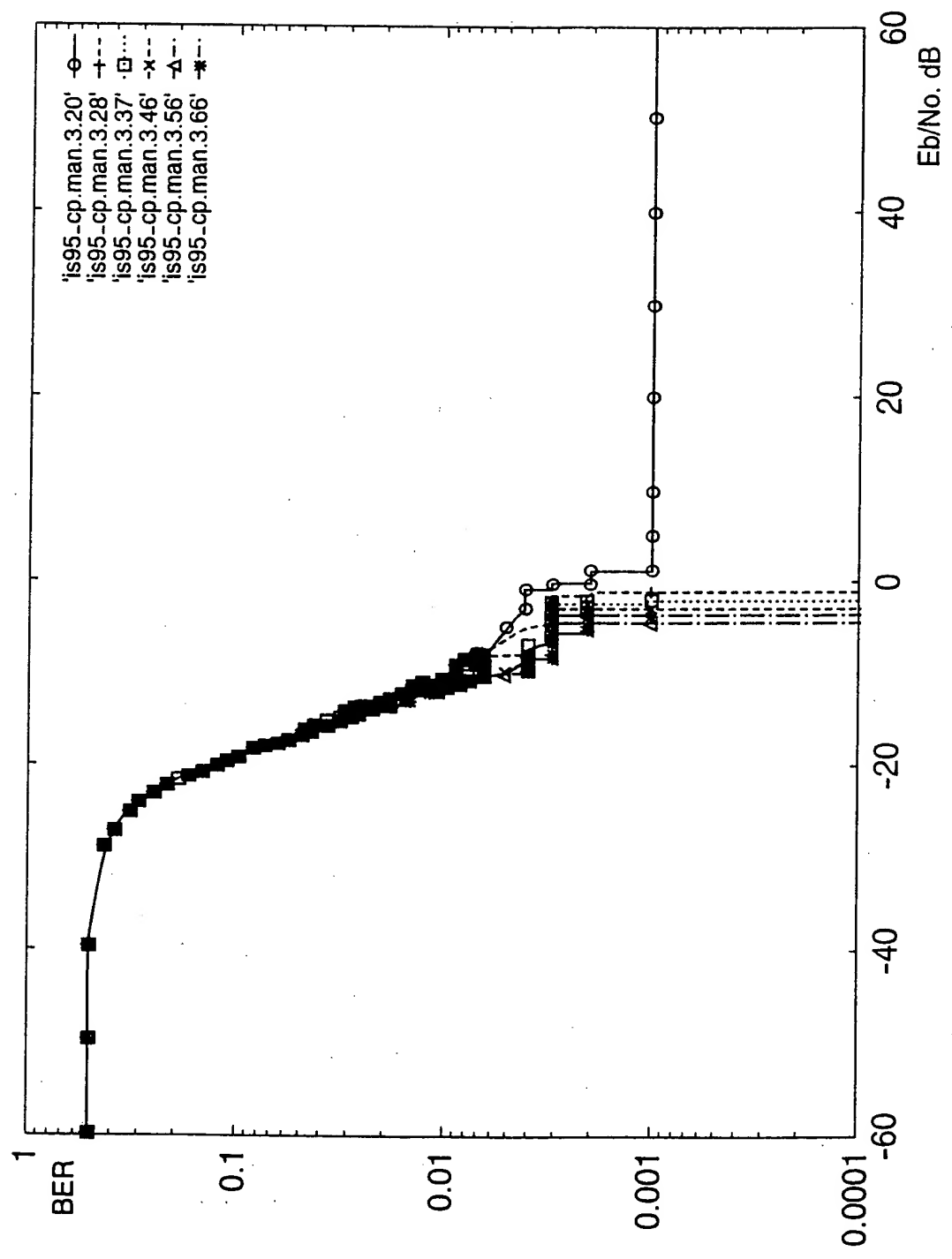
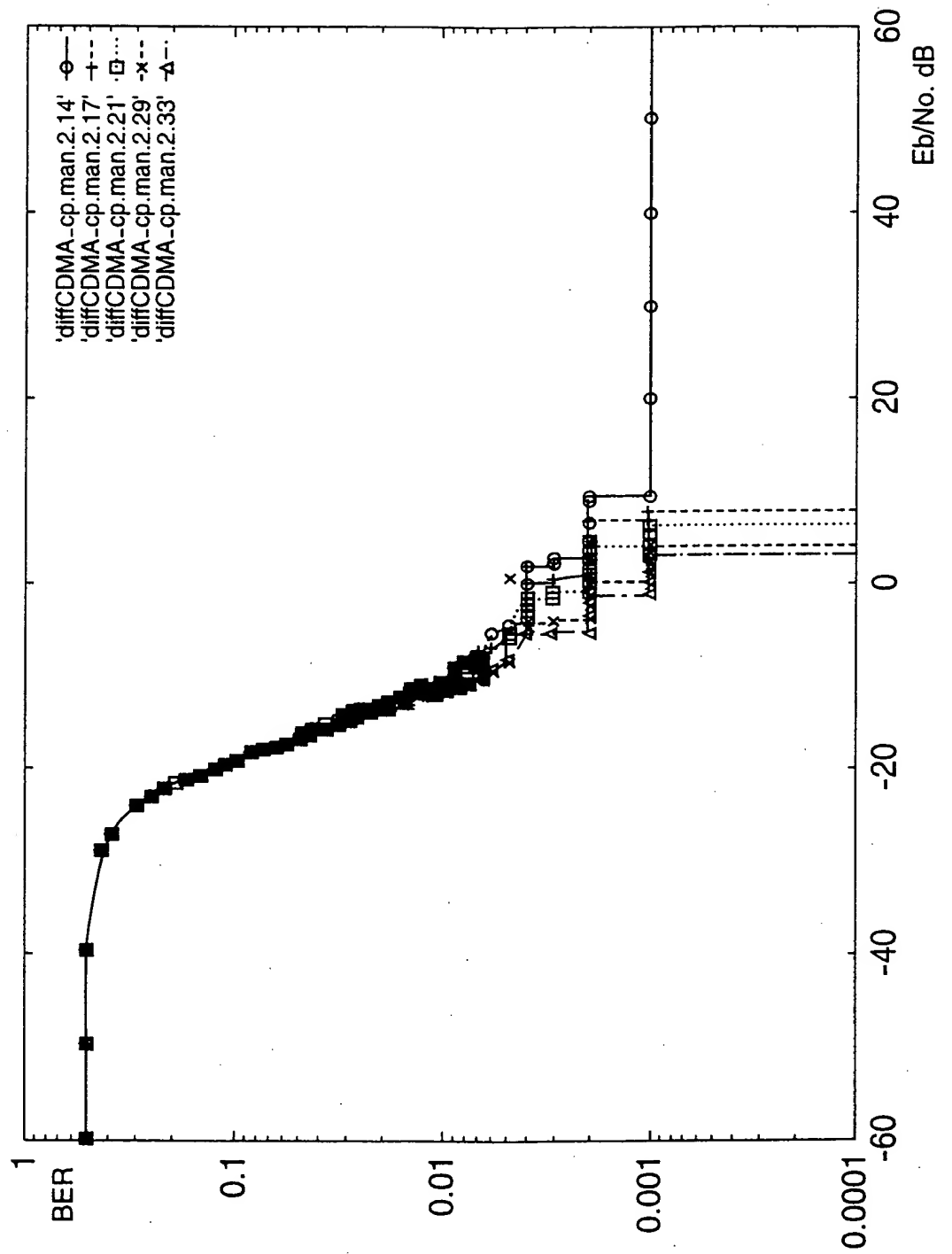


FIG. 21

TRANSMISSION CHARACTERISTICS IN PEDESTRIAN TELEPHONE MODE OF  
PHASE CONTINUOUS DIFFERENTIAL CDMA TRANSMISSION SYSTEM





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FIG. 22

TRANSMISSION CHARACTERISTICS IN PEDESTRIAN TELEPHONE MODE OF  
CHIP CONTINUOUS DIFFERENTIAL CDMA TRANSMISSION SYSTEM

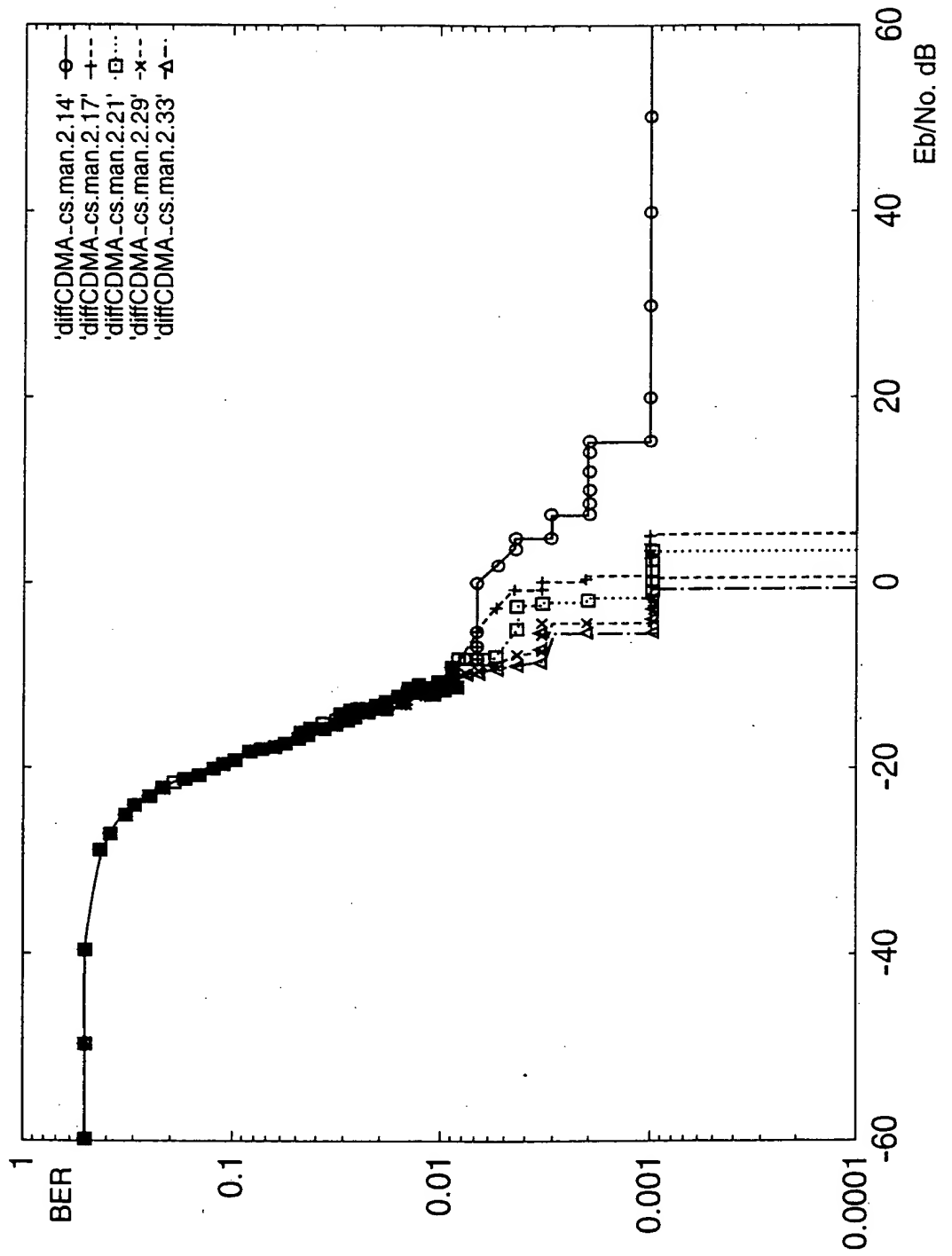




FIG. 23

TRANSMISSION CHARACTERISTICS IN PEDESTRIAN TELEPHONE MODE OF  
PHASE/CHIP CONTINUOUS PILOT TRANSMISSION SYSTEM

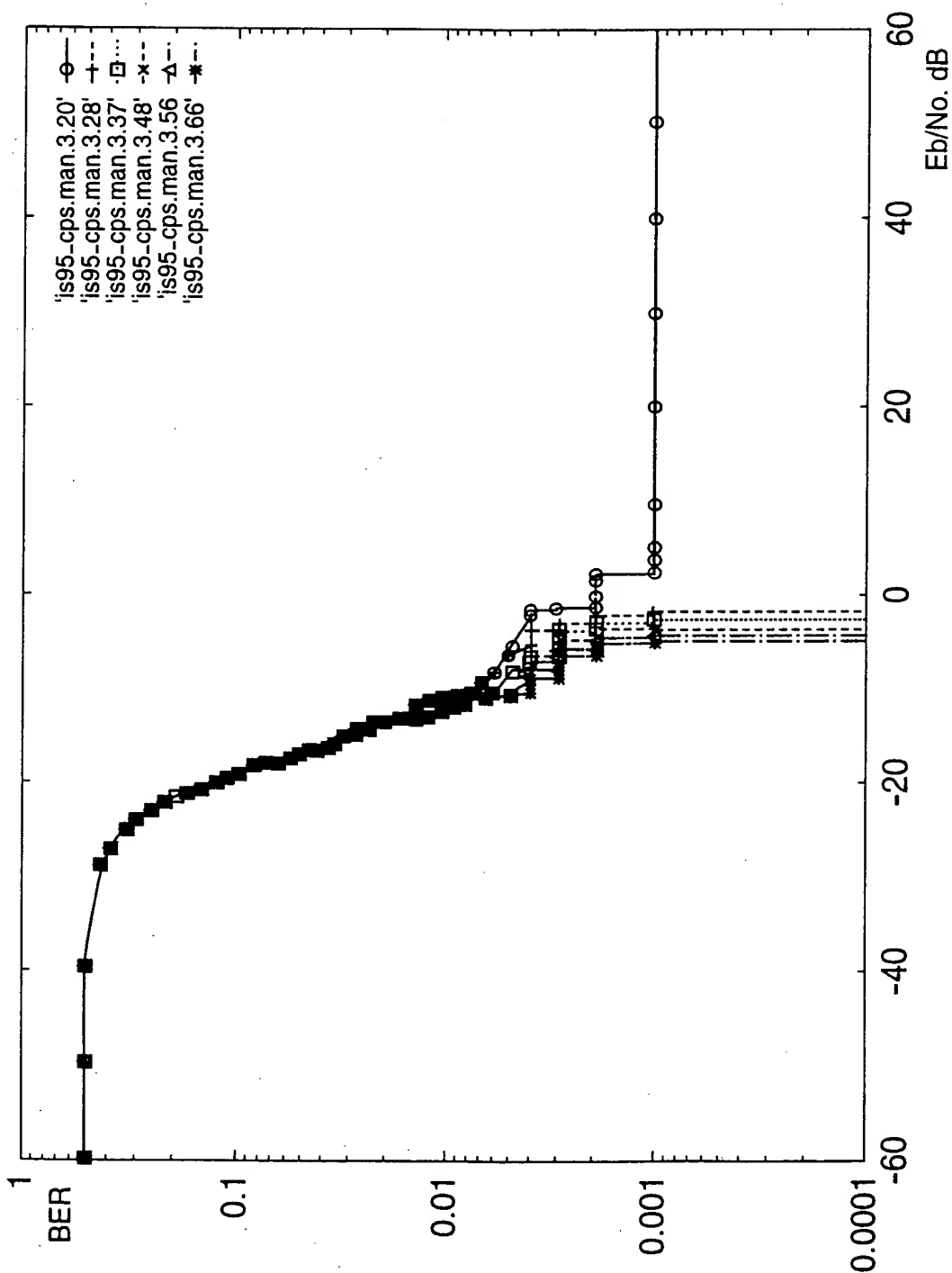






FIG. 24

TRANSMISSION CHARACTERISTICS IN PEDESTRIAN TELEPHONE MODE OF  
PHASE/CHIP CONTINUOUS DIFFERENTIAL CDMA TRANSMISSION SYSTEM

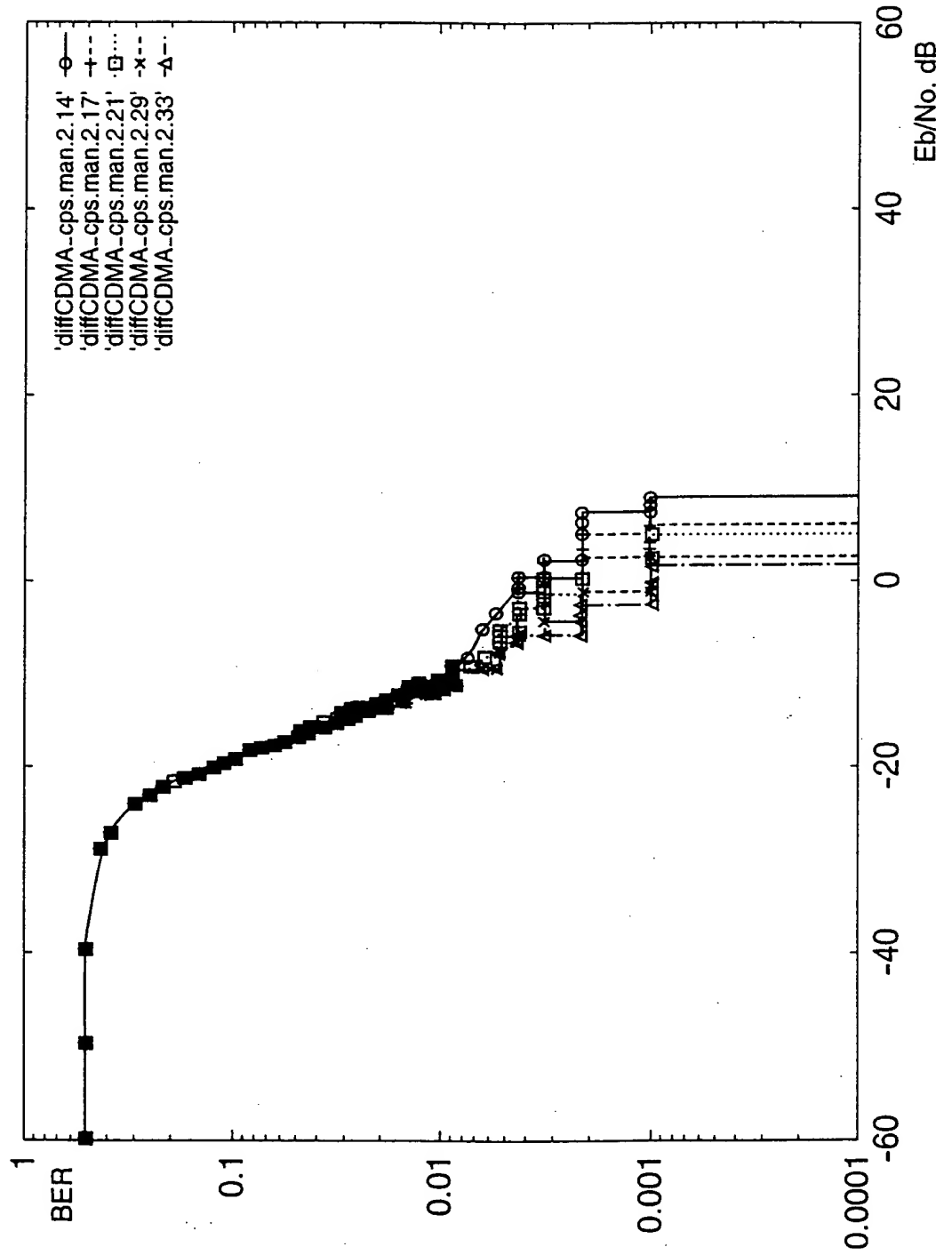
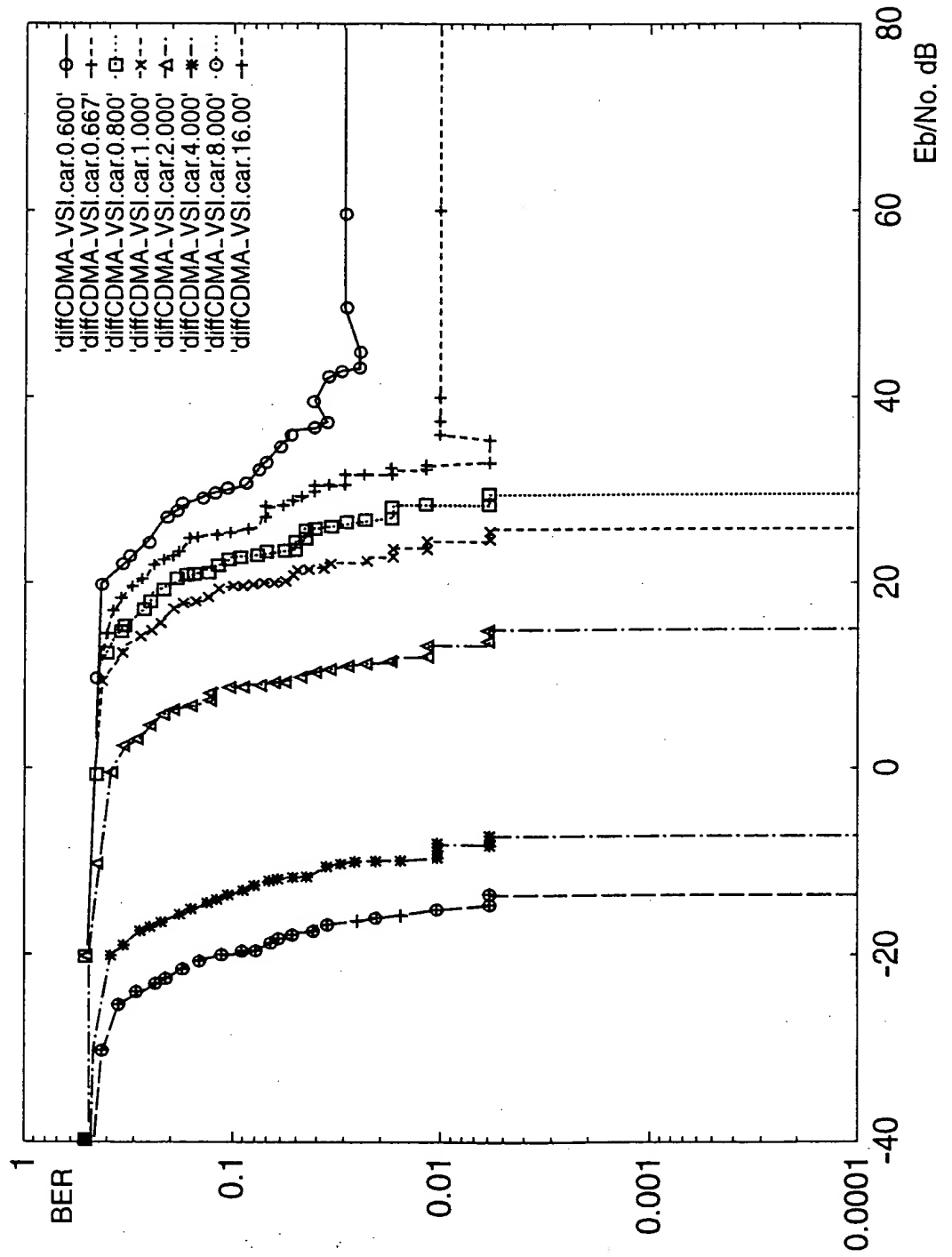


FIG. 25

TRANSMISSION CHARACTERISTICS IN AUTOMOBILE TELEPHONE MODE OF  
VIRTUAL SEGMENT DIFFERENTIAL CDMA TRANSMISSION SYSTEM





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FIG. 26

EXAMPLE OF A CONFIGURATION OF THE CONVENTIONAL CDMA TRANSMITTER

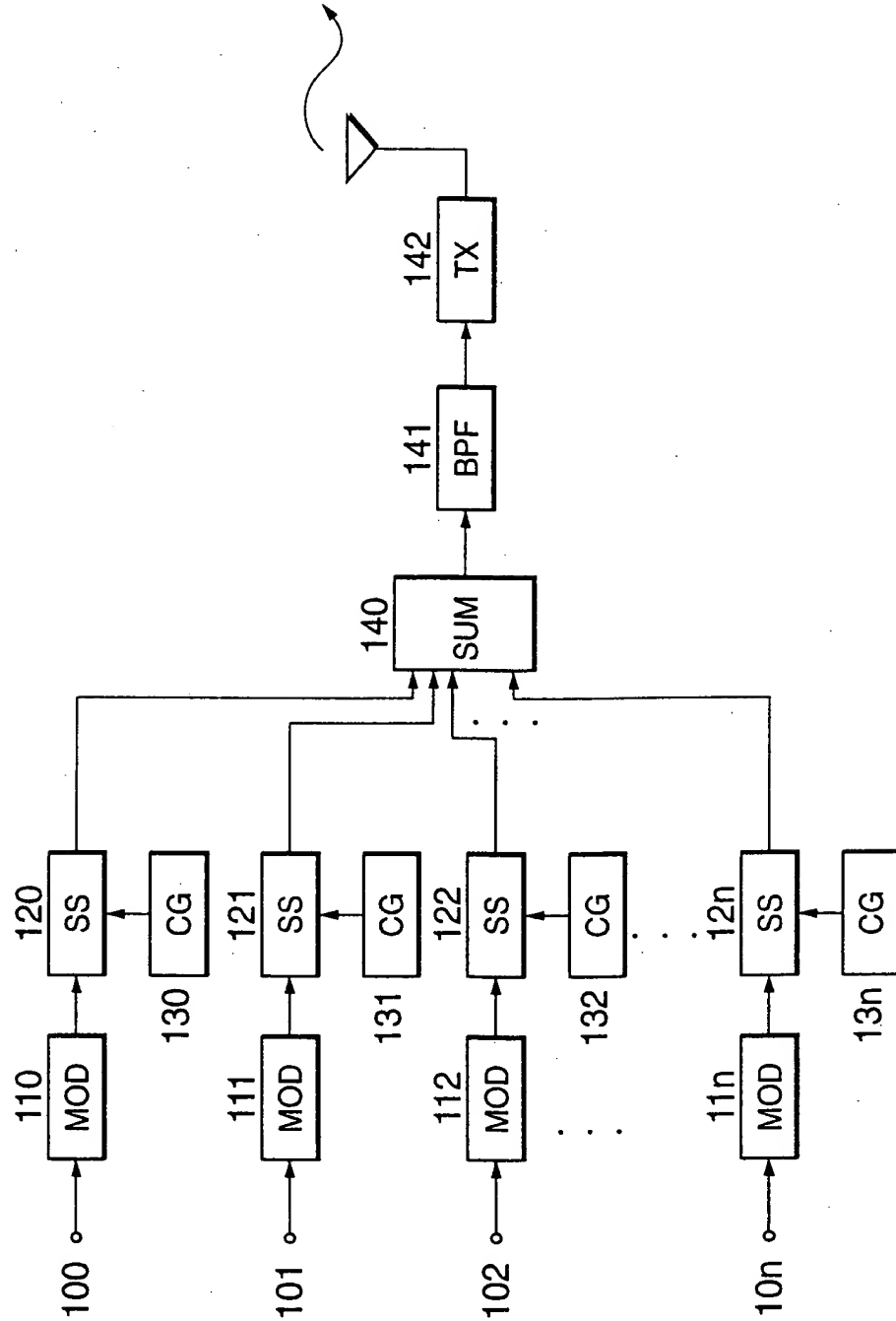


FIG. 27

SCHEMATIC VIEW OF PRIMARY MODULATED WAVE AND SYMBOL STRUCTURE

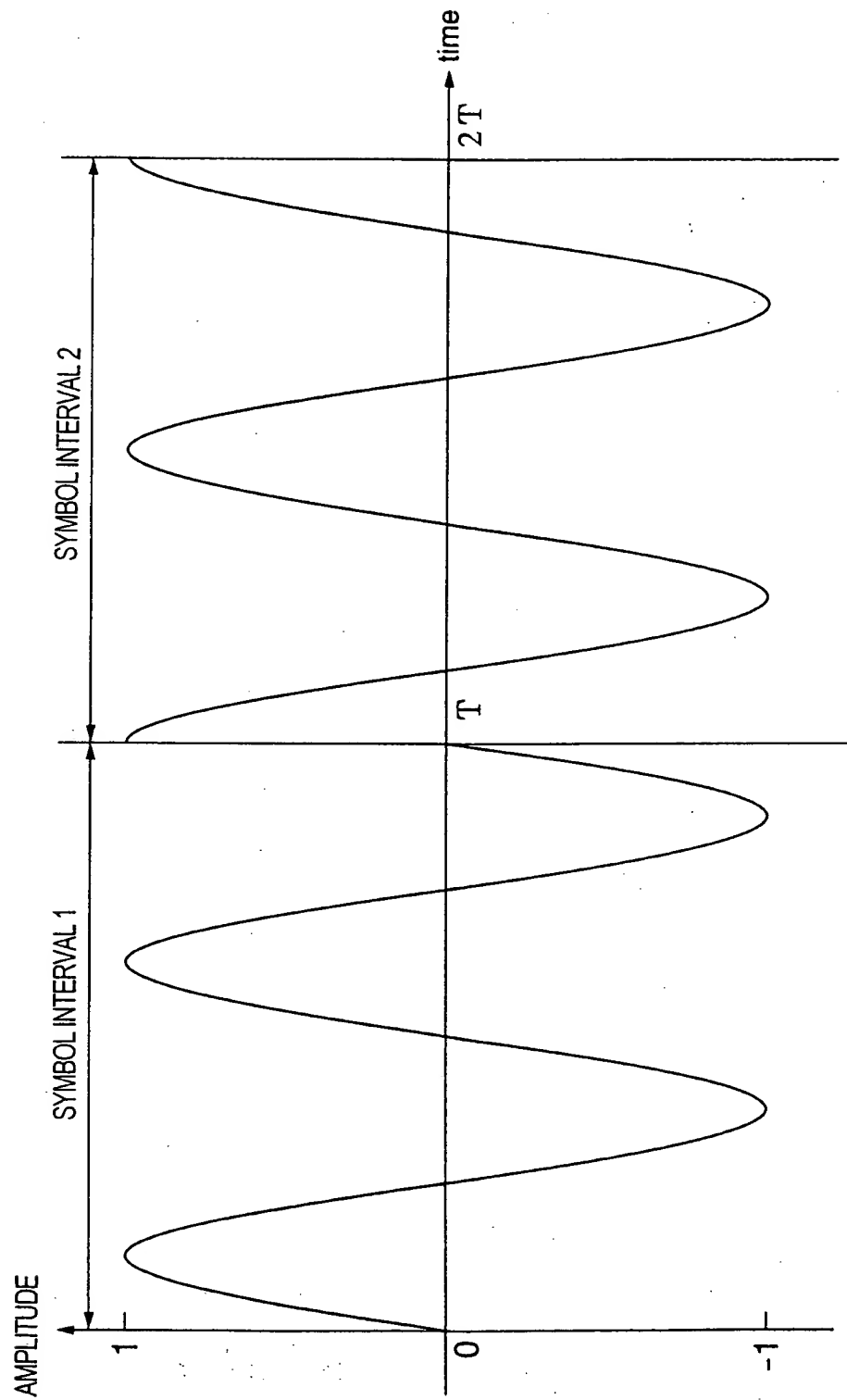


FIG. 28

EXAMPLE OF QPSK BIT CONSTELLATION

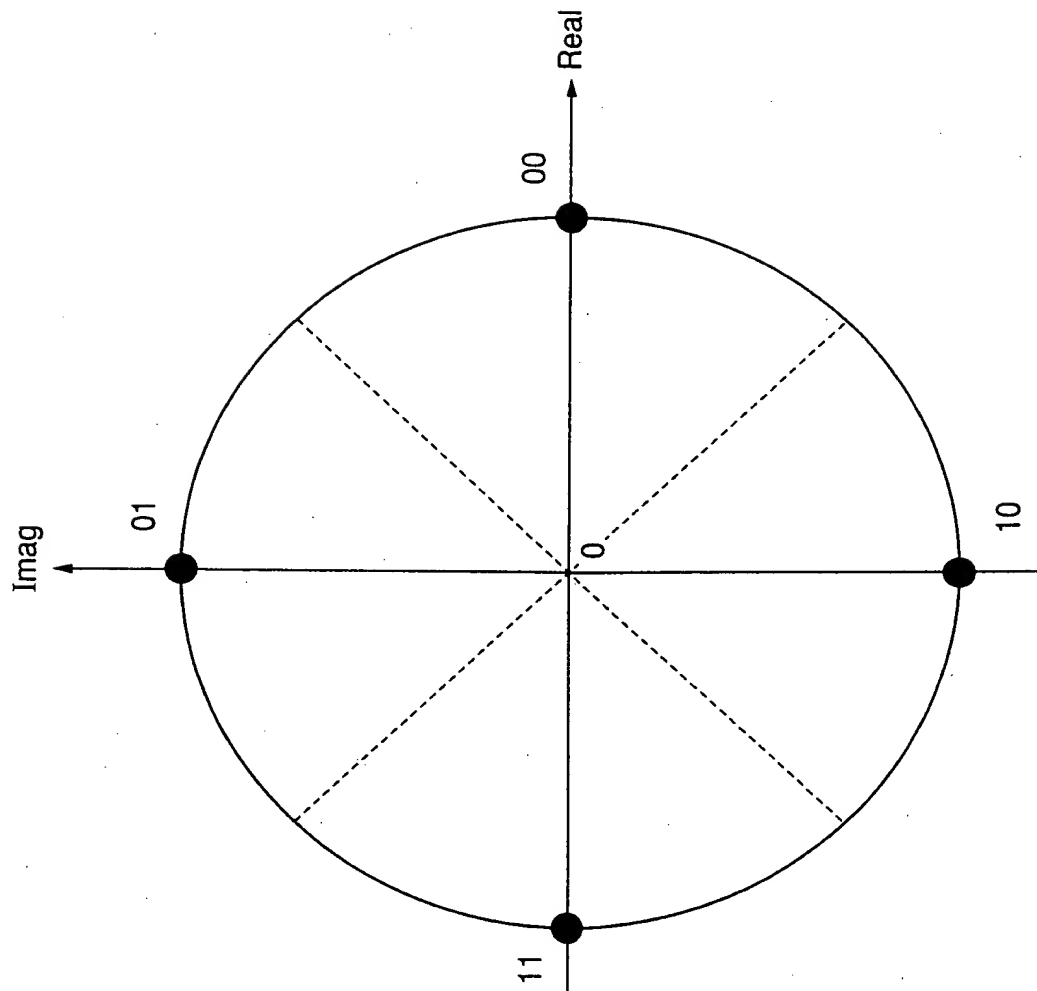


FIG. 29

EXAMPLE OF  $\pi/4$ -SHIFTED QPSK BIT CONSTELLATION

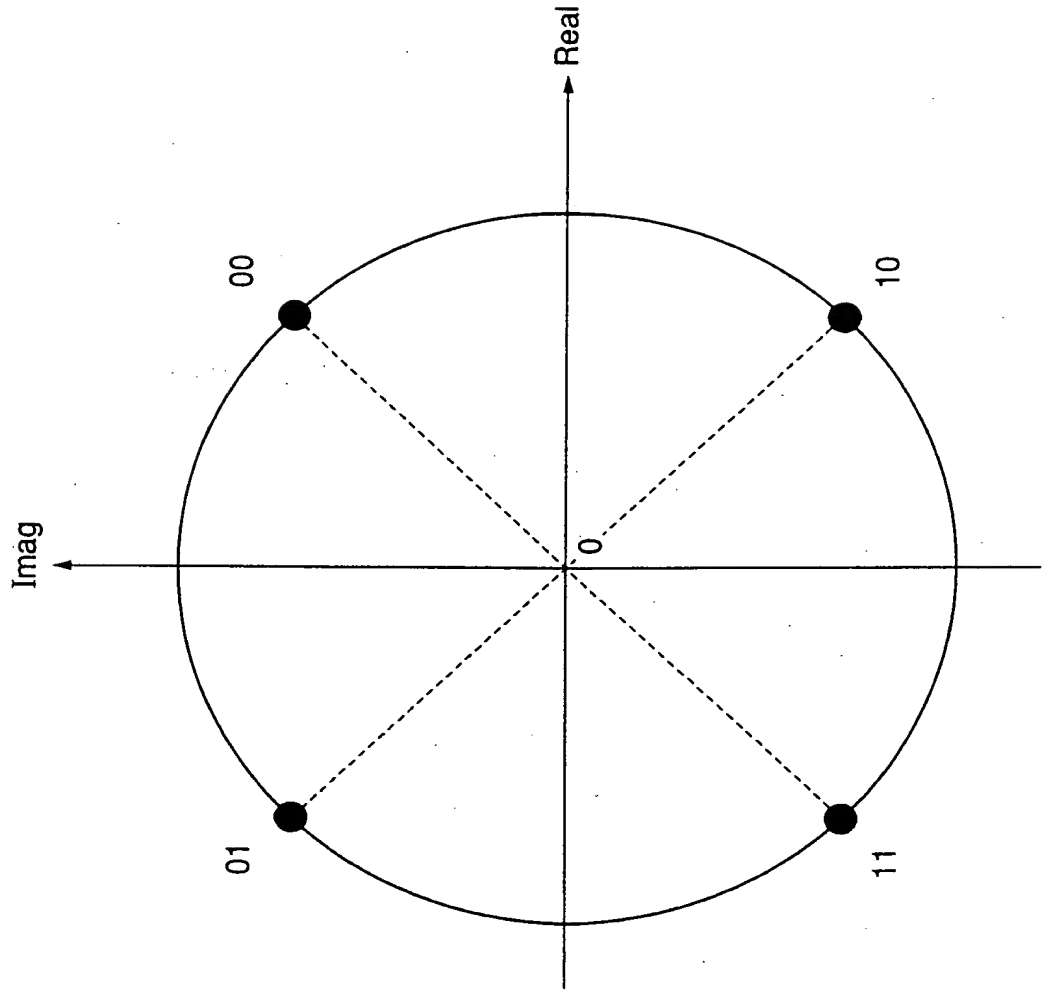


FIG. 30

EXAMPLE OF SEGMENT STRUCTURE IN A SYMBOL INTERVAL OF PRIMARY MODULATED WAVE

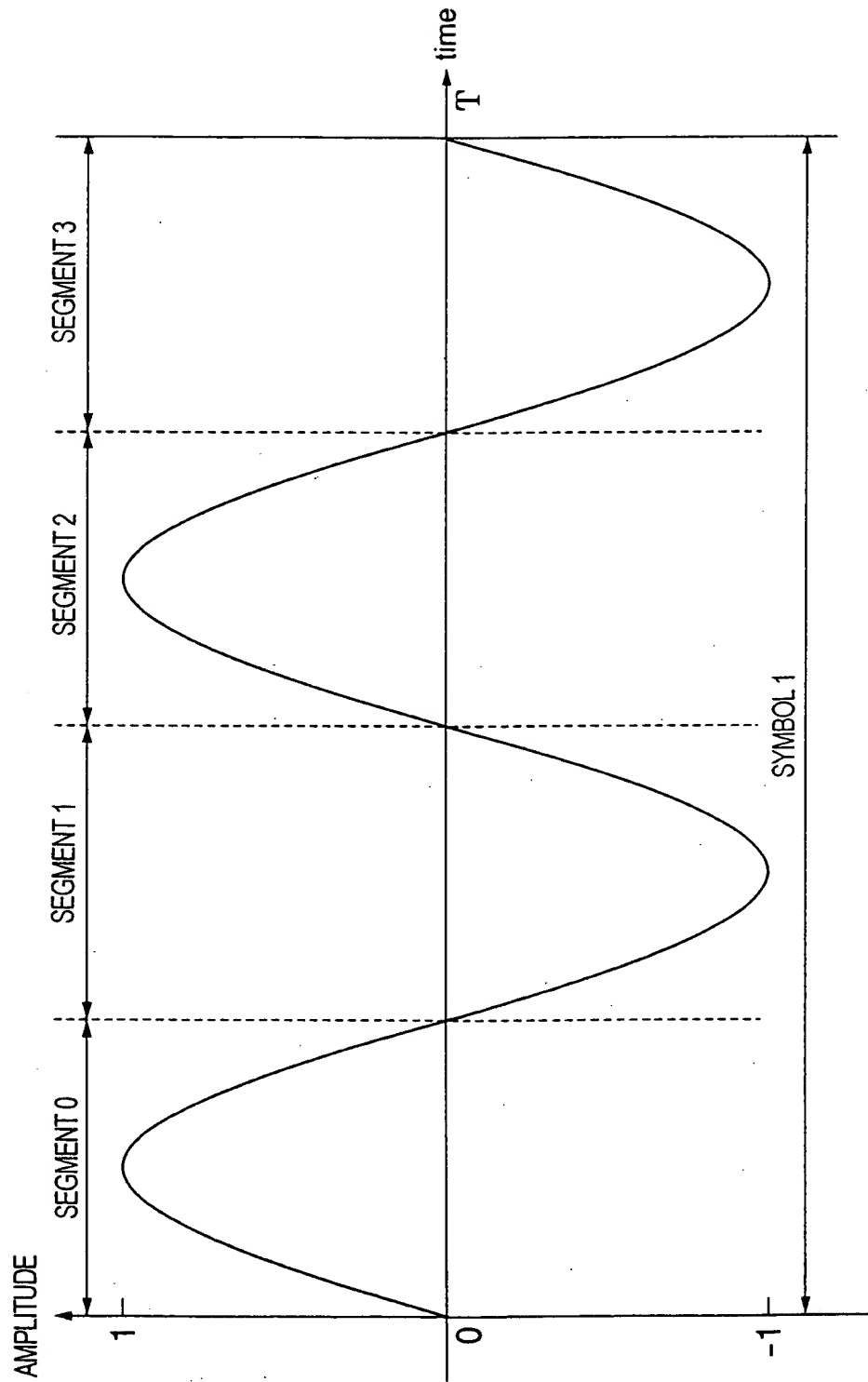


FIG. 31

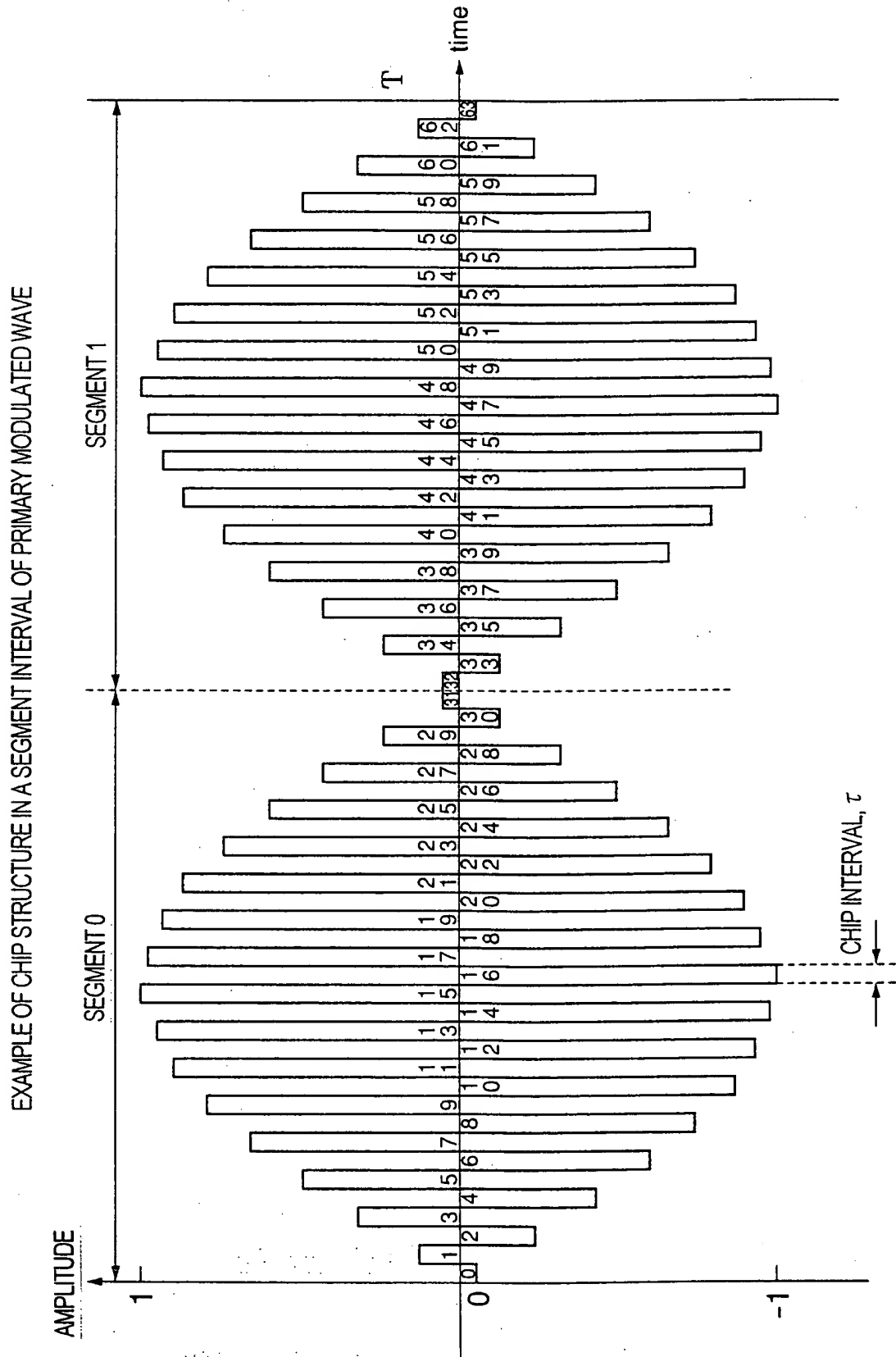




FIG. 32

EXAMPLE OF A CONFIGURATION OF THE CONVENTIONAL CDMA RECEIVER

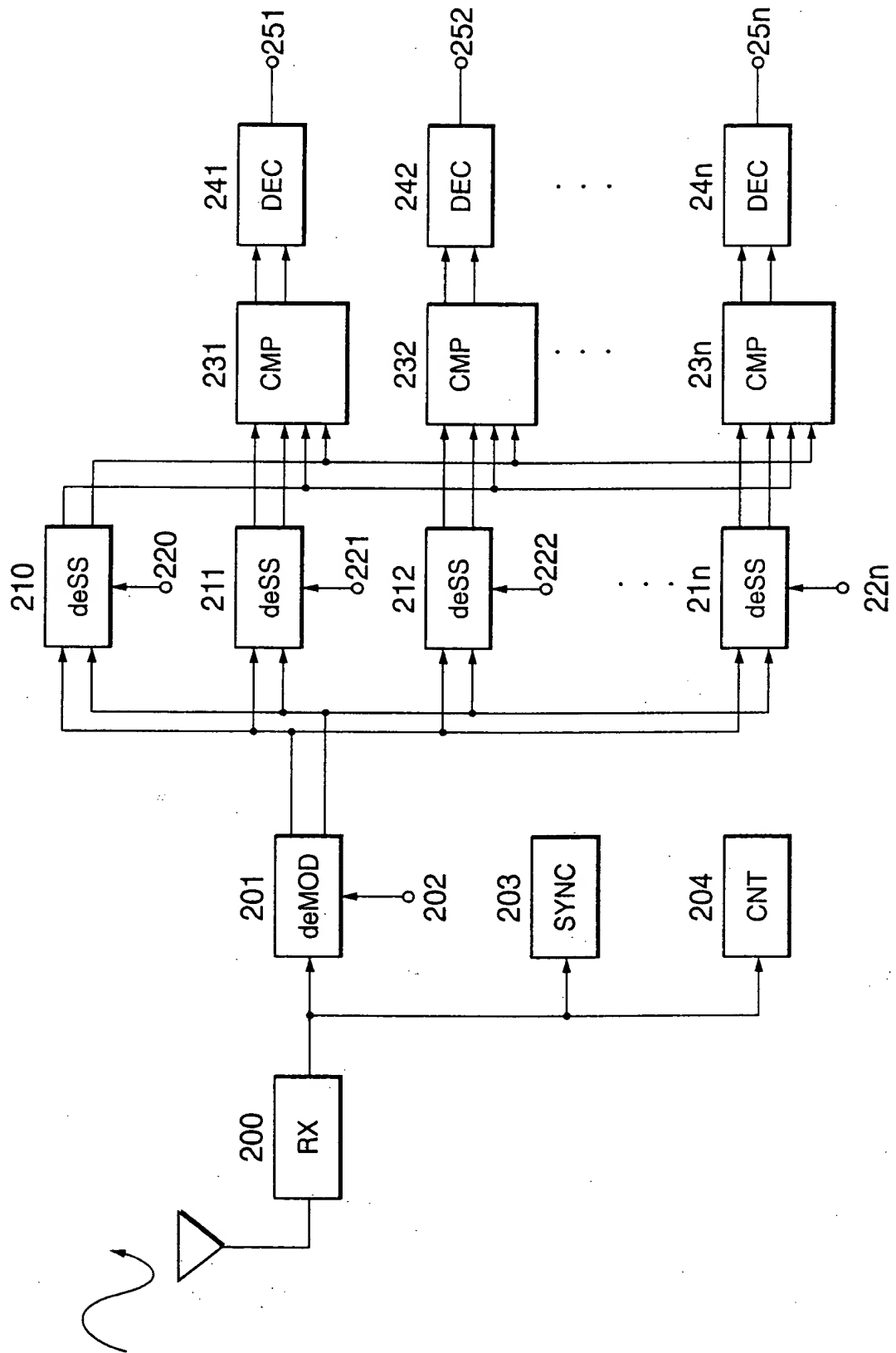


FIG. 33

EXAMPLE OF A DETAILED CONFIGURATION OF DEMODULATOR CIRCUIT (de MOD)

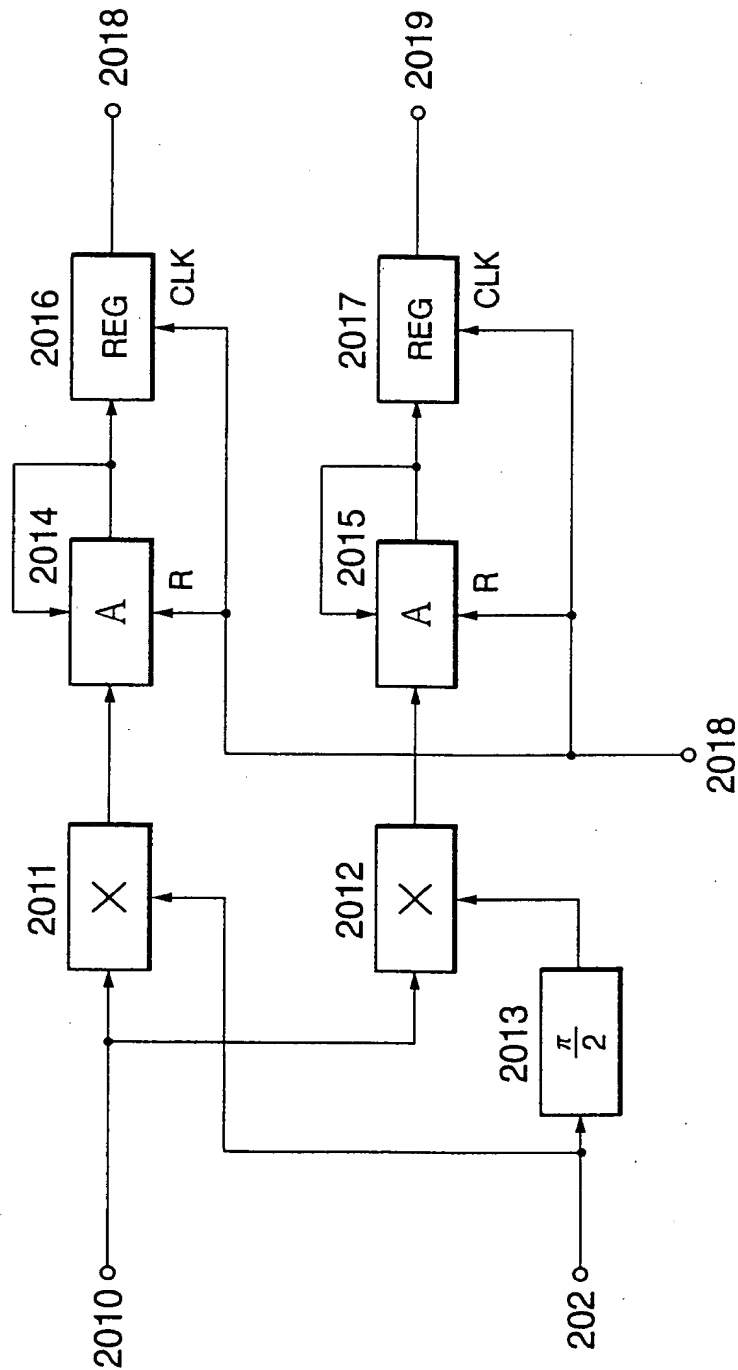


FIG. 34

EXAMPLE OF A DETAILED CONFIGURATION OF DESPREADING CIRCUIT (deSS)

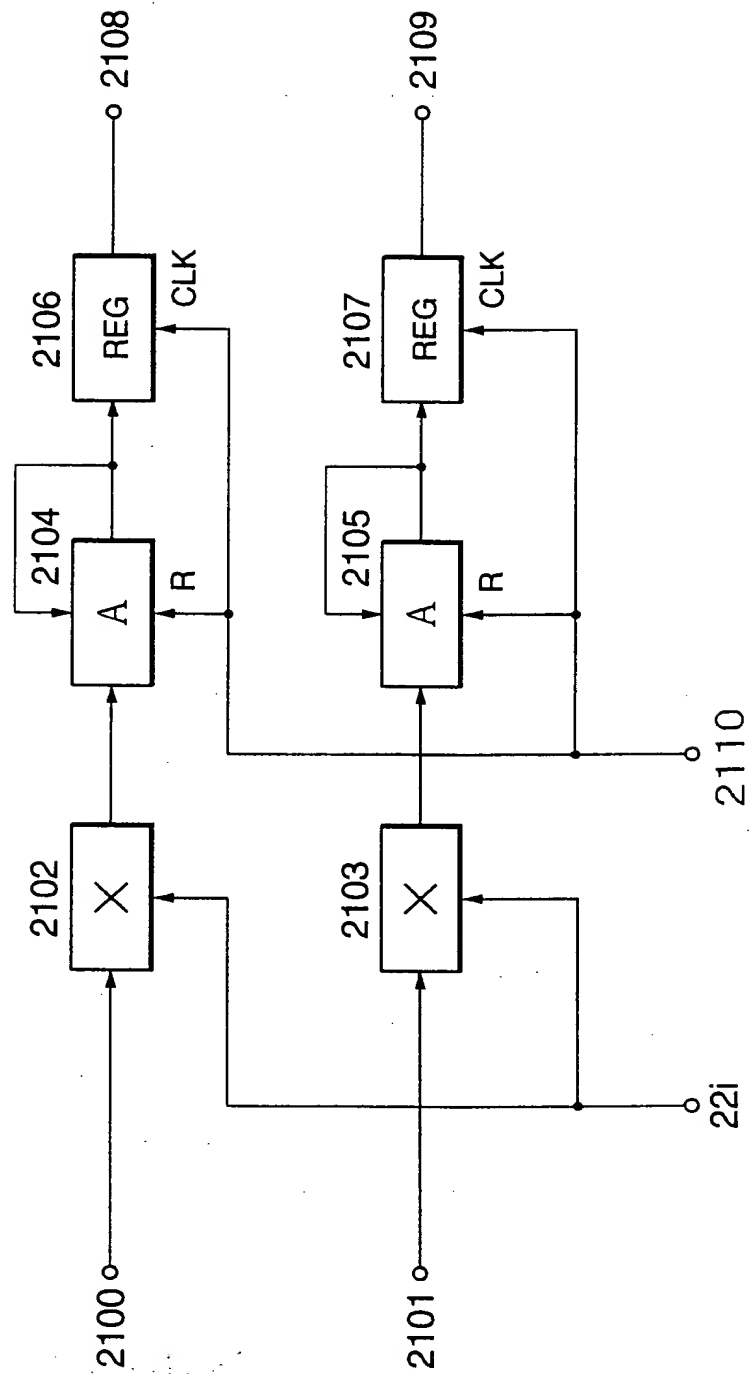


FIG. 35

EXAMPLE OF A DETAILED CONFIGURATION OF PHASE CORRECTION CIRCUIT (CMP)

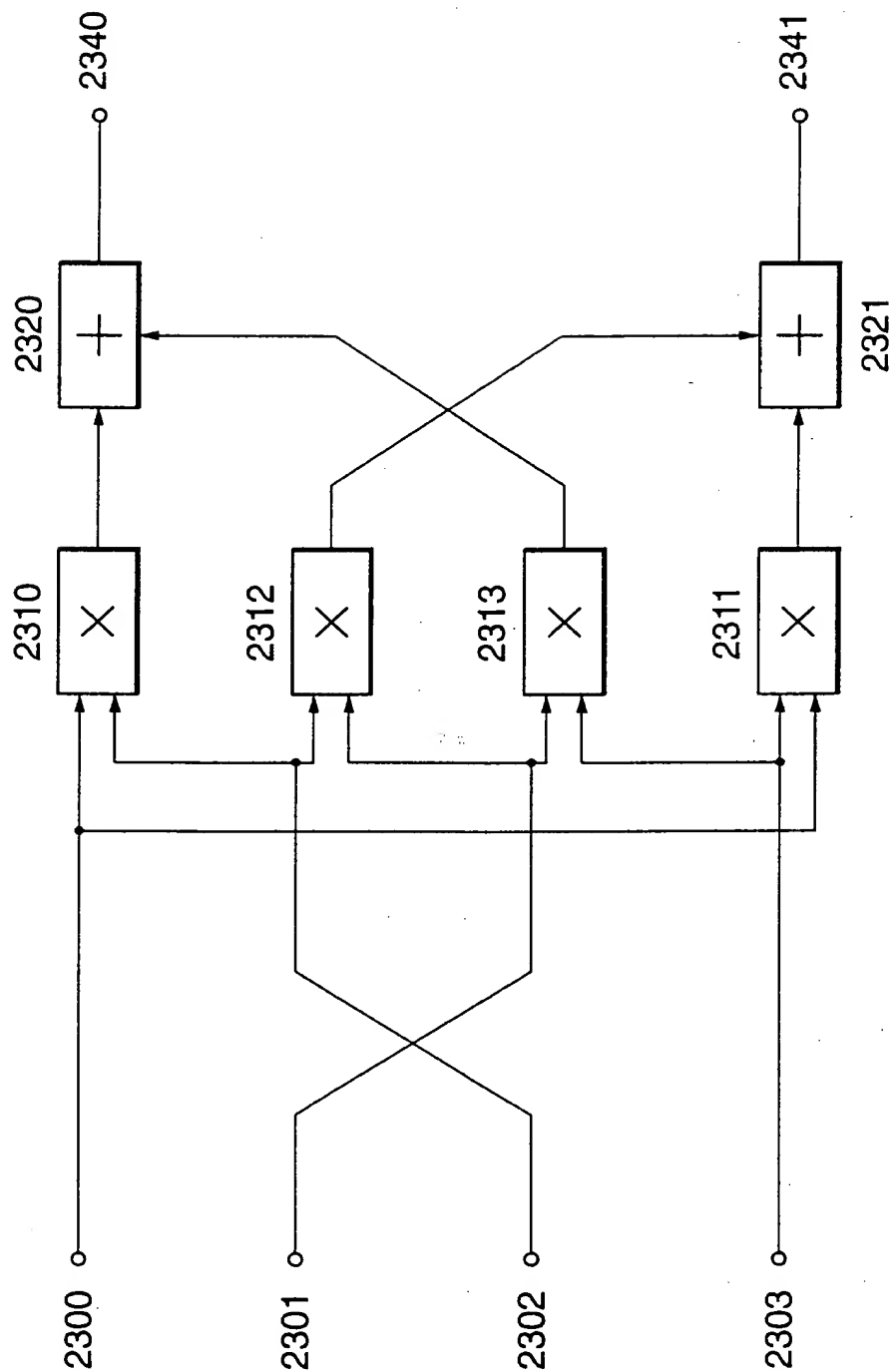




FIG. 36

TRANSMISSION CHARACTERISTICS IN STATIONARY TELEPHONE MODE OF THE CONVENTIONAL SYSTEM

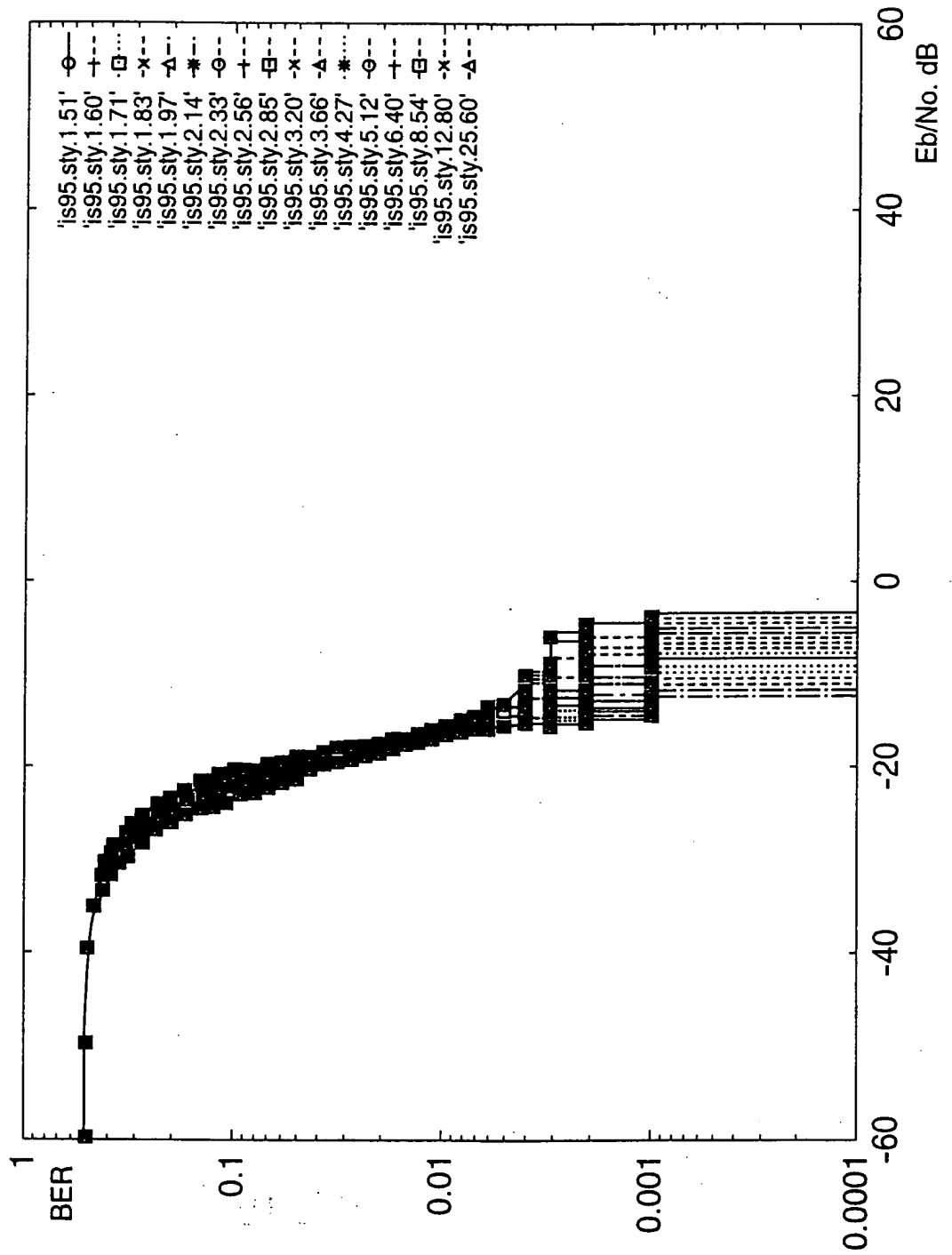




FIG. 37

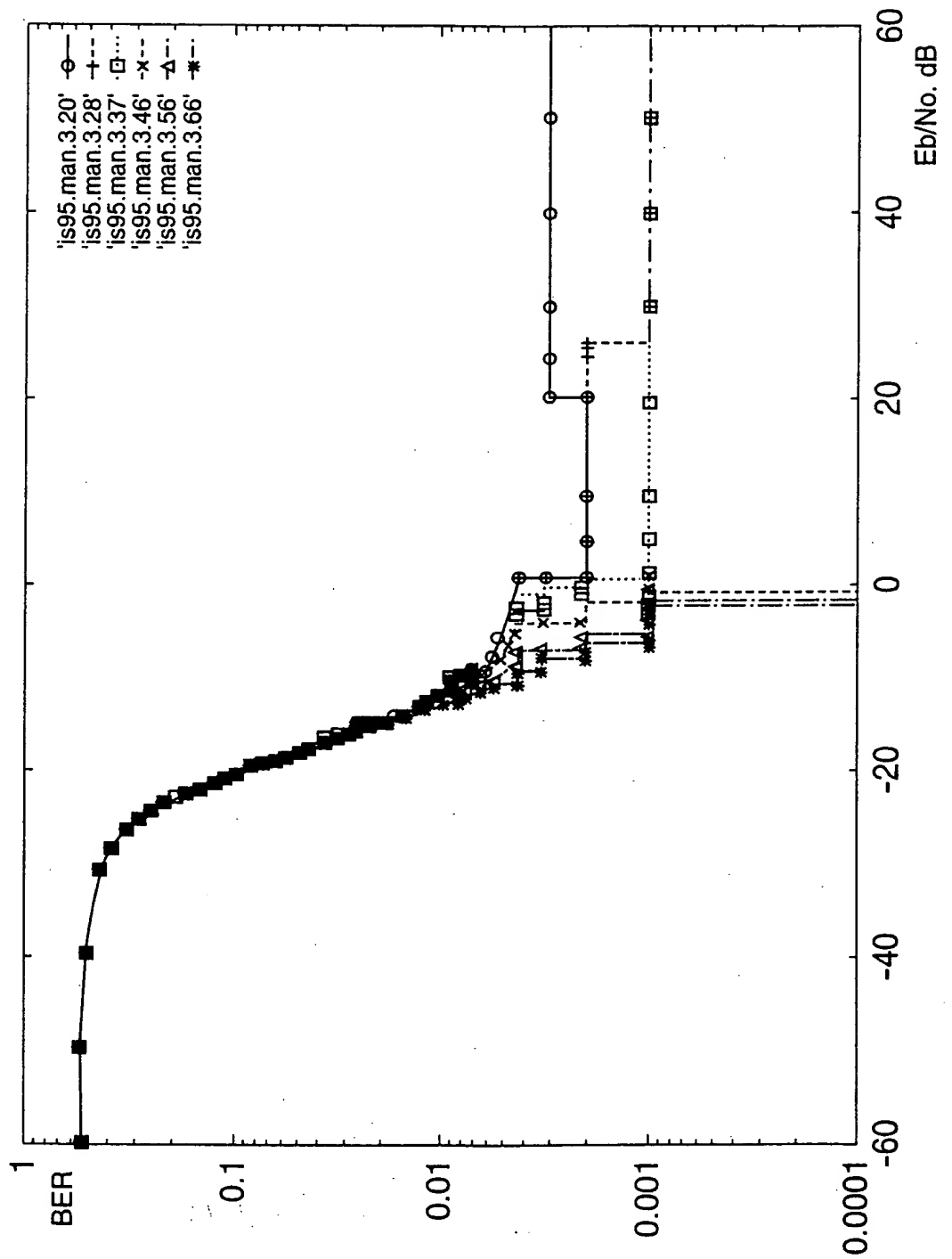
TRANSMISSION CHARACTERISTICS IN PEDESTRIAN TELEPHONE MODE OF  
THE CONVENTIONAL SYSTEM



FIG.38

TRANSMISSION CHARACTERISTICS IN AUTOMOBILE TELEPHONE MODE OF THE CONVENTIONAL SYSTEM

